



BOBBY JINDAL
GOVERNOR

HAROLD LEGGETT, PH.D.
SECRETARY

State of Louisiana

DEPARTMENT OF ENVIRONMENTAL QUALITY

ENVIRONMENTAL SERVICES

Certified Mail No.

Activity No.: PER20080004
Agency Interest No.: 4013

Mr. Mark G. Jakel
Plant Manager
Georgia Gulf Lake Charles, LLC
1600 VCM Plant Road
Westlake, LA 70669

RE: Part 70 Operating Permit Modification, VCM Plant, Georgia Gulf Lake Charles, LLC, Westlake, Calcasieu Parish, Louisiana

Dear Mr. Jakel:

This is to inform you that the permit modification for the above referenced facility has been approved under LAC 33:III.501. The permit is both a state preconstruction and Part 70 Operating Permit. The submittal was approved on the basis of the emissions reported and the approval in no way guarantees the design scheme presented will be capable of controlling the emissions as to the types and quantities stated. A new application must be submitted if the reported emissions are exceeded after operations begin. The synopsis, data sheets and conditions are attached herewith.

It will be considered a violation of the permit if all proposed control measures and/or equipment are not installed and properly operated and maintained as specified in the application.

Operation of this facility is hereby authorized under the terms and conditions of this permit. This authorization shall expire at midnight on the 27th of October, 2010, unless a timely and complete renewal application has been submitted six months prior to expiration. Terms and conditions of this permit shall remain in effect until such time as the permitting authority takes final action on the application for permit renewal. The permit number and agency interest number cited above should be referenced in future correspondence regarding this facility.

Done this _____ day of _____, 2009.

Permit No.: 0520-00012-V1

Sincerely,

Cheryl Sonnier Nolan
Assistant Secretary
CSN:QMZ
c: EPA Region VI

**AIR PERMIT BRIEFING SHEET
AIR PERMITS DIVISION
LOUISIANA DEPARTMENT OF ENVIRONMENTAL QUALITY**

**VCM Plant
Agency Interest No. 4013
Georgia Gulf Lake Charles, LLC
Westlake, Calcasieu Parish, Louisiana**

I. Background

The VCM Plant was constructed in 1967, which produces vinyl chloride monomer (VCM). The facility is located in Westlake, Calcasieu Parish. The previous permit number for the facility is 0520-00012-V0, issued October 27, 2005.

This is the Part 70 operating permit modification to Permit No. 0520-00012-V0 for the facility.

II. Origin

A permit application and Emission Inventory Questionnaire, dated October 29, 2008, were submitted by Georgia Gulf Lake Charles, LLC requesting a Part 70 operating permit modification.

III. Description

The VCM Plant produces VCM by thermally cracking the intermediate ethylene dichloride (EDC). EDC is produced both in a direct chlorination reaction process and an oxychlorination reaction process. The direct chlorination and oxychlorination EDC streams are combined and purified in aqueous wash and distillation process.

The purified EDC is thermally cracked to VCM and hydrogen chloride in gas fired cracking furnaces. The VCM, hydrogen chloride, and the uncracked EDC are separated by distillation. The hydrogen chloride gas is reacted with ethylene gas and oxygen over a solid catalyst to produce more EDC. This EDC, along with the uncracked EDC from the cracking furnaces, is recycled to EDC purification. The VCM is purified and dried prior to on-site storage.

The chlorine and ethylene feedstocks are received by pipeline. The VCM product is shipped by railcar. Heavy ends byproduct is shipped by trucks.

The emissions from process, loading, and storage vents in the VCM unit are routed to two parallel thermal oxidizers through an extensive vent header system. The vent stream from each thermal oxidizer is then routed to an aqueous absorbing column followed by a caustic scrubbing column to control emissions of halogens and hydrogen halides. Emissions from the two trains are routed to a common stack (Emission Point VS-901). Hydrogen chloride, produced from the thermal oxidizer combustion, is removed as a by-product in the aqueous absorbing column, which is used internally or is stored for shipment as weak hydrochloric acid (muriatic acid).

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Process water is collected and treated in an enclosed steam stripping system that vents to the thermal oxidizers. The process wastewater from the VCM unit is treated further in an activated sludge unit owned and operated by another facility (Sasol). VCM unit stormwater from processing areas is collected in storage tanks, some of which vent to the thermal oxidizers.

With this permit modification, Georgia Gulf Lake Charles, LLC proposes the following changes:

- Add 2 generators, 3 air compressors, and 1 stormwater collection tank to the VCM Plant.
- Incorporate 3 insignificant activities to the permit.
- Make administrative changes for several emission point sources (descriptions, emission rates, etc.).

Addition of the air compressors triggers the applicability of NSPS Subpart IIII (Title I modification). Estimated emissions in tons per year are as follows:

<u>Pollutant</u>	<u>Before</u>	<u>After</u>	<u>Change</u>
PM ₁₀	16.06	16.13	+ 0.07
SO ₂	2.28	3.28	+ 1.00
NO _x	106.86	110.50	+ 3.64
CO	134.88	135.75	+ 0.87
VOC*	54.87	55.11	+ 0.24

***VOC LAC 33:III Chapter 51 Toxic Air Pollutants (TAPs):**

<u>Pollutant</u>	<u>Before</u>	<u>After</u>	<u>Change</u>
1,1,2,2-Tetrachloroethane	0.02	< 0.01	- 0.02
1,1,2-Trichloroethane	0.25	0.25	-
1,1-Dichloroethane	0.05	0.05	-
1,2-Dichloroethane	18.79	13.80	- 4.99
1,2-Dichloropropane	< 0.01	< 0.01	-
1,3-Butadiene	0.024	0.024	-
1,3-Dichloropropene	0.01	0.01	-
1,4-Dichlorobenzene	< 0.01	< 0.01	-
2,2'-Dichlorodiethyl ether	0.02	0.02	-
2,2,4-Trimethylpentane	< 0.01	< 0.01	-
2-Methylnaphthalene	< 0.01	< 0.01	-
Acetaldehyde	-	< 0.01	< 0.01
Benzene	0.02	0.04	+ 0.02
Carbon Tetrachloride	2.19	1.02	- 1.17

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***VOC LAC 33:III Chapter 51 Toxic Air Pollutants (TAPs):**

Pollutant	Before	After	Change
Chlorinated Dibenzo-P-Dioxins	0.0000008	0.0000008	-
Chlorinated Dibenzofurans	0.0000008	0.0000008	-
Chlorobenzene	0.024	0.024	-
Chloroethane	0.68	0.68	-
Chloroform	8.84	8.25	- 0.59
Chloroprene	0.01	0.05	+ 0.04
Dichlorobenzene	0.001	0.001	-
Dichloromethane	< 0.01	< 0.01	-
Ethylbenzene	< 0.01	< 0.01	-
Ethylene Glycol	0.03	0.03	-
Ethylene Oxide	0.01	0.02	+ 0.01
Formaldehyde	0.04	0.04	-
Hexachlorobutadiene	0.004	0.004	-
Methanol	0.01	0.01	-
Methyl Chloride	0.50	0.50	-
n-Butyl Alcohol	< 0.01	< 0.01	-
n-Hexane	1.45	1.45	-
Naphthalene	< 0.01	< 0.01	-
Polynuclear Aromatic	< 0.001	< 0.001	-
Hydrocarbons			
Styrene	< 0.01	< 0.01	-
Toluene	0.02	0.02	-
Trichloroethylene	0.24	0.26	+ 0.02
Vinyl Chloride	7.63	7.53	- 0.10
Vinylidene Chloride	< 0.01	0.01	+ 0.01
Xylene	< 0.01	< 0.01	-
Total	40.85	34.08	- 6.77

Other VOC (TPY): 21.03

IV. Type of Review

This permit was reviewed for compliance with 40 CFR 70, the Louisiana Air Quality Regulations, New Source Performance Standards (NSPS), and National Emission Standards for Hazardous Air Pollutants (NESHAP). Prevention of Significant Deterioration (PSD) review is not required.

This facility is a major source of toxic air pollutants (TAPs) pursuant to LAC 33:III.Chapter 51.

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V. Credible Evidence

Notwithstanding any other provisions of any applicable rule or regulation or requirement of this permit that state specific methods that may be used to assess compliance with applicable requirements, pursuant to 40 CFR Part 70 and EPA's Credible Evidence Rule, 62 Fed. Reg. 8314 (Feb. 24, 1997), any credible evidence or information relevant to whether a source would have been in compliance with applicable requirements if the appropriate performance or compliance test or procedure had been performed shall be considered for purposes of Title V compliance certifications. Furthermore, for purposes of establishing whether or not a person has violated or is in violation of any emissions limitation or standard or permit condition, nothing in this permit shall preclude the use, including the exclusive use, by any person of any such credible evidence or information.

VI. Public Notice

A notice requesting public comment on the permit was published in *The Advocate*, Baton Rouge, on <date>, 2009; and in the <local paper>, <local town>, on <date>, 2009. A copy of the public notice was mailed to concerned citizens listed in the Office of Environmental Services Public Notice Mailing List on <date>, 2009. The draft permit was also submitted to US EPA Region VI on <date>, 2009. All comments will be considered prior to the final permit decision.

VII. Effects on Ambient Air

Emissions associated with the facility were reviewed by the Air Quality Assessment Division to ensure compliance with the NAAQS and AAS. LDEQ did not require the applicant to model emissions.

Dispersion Model(s) Used: None

Pollutant	Time Period	Calculated Maximum Ground Level Concentration	Louisiana Toxic Air Pollutant Ambient Air Quality Standard or (National Ambient Air Quality Standard {NAAQS})

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VIII. General Condition XVII Activities

Work Activity	Schedule	Emission Rates – TPY
Sampling	24,300 samples/yr	VOC: 0.01
Pump Maintenance	125 times/yr	VOC: 0.03
Tank Sludge Removal	1 time/yr	VOC: 0.02
Carbon Bed Replacement	6 times/yr	VOC: < 0.01
Instrument Maintenance	2,000 times/yr	VOC: 0.08
Sump Solids Removal	1 time/yr	VOC: 0.08
Nitrogen Clearing of Equipment/Lines	150 clearings/yr	VOC: < 0.01
Filter and Strainer Change-Outs	1,150 times/yr	VOC: 0.49
Compressor and Vent Maintenance	2 times/yr	VOC: 0.02
Valve Maintenance	300 times/yr	VOC: 0.06
Vessel and Equipment Preparation	52 times/yr	VOC: 0.01
Miscellaneous Equipment Preparation	1 time/yr	VOC: 0.01
Miscellaneous Equipment Clearing	1 time/yr	VOC: 0.01
Propylene System Vent Purge	2 times/yr	VOC: 4.00
Frac Tanks for Maintenance Activities	(3 tanks)	VOC: 0.02

IX. Insignificant Activities

ID No.	Description	Citation
T-83	Diesel Storage Tank (500 gal)	LAC 33:III.501.B.5.A.3
T-337	BL-307 Oil Reservoir (1,000 gal)	LAC 33:III.501.B.5.A.3
T-531	BL-501 Oil Reservoir (620 gal)	LAC 33:III.501.B.5.A.3
AI-301	AI-301 Analyzer Detector	LAC 33:III.501.B.5.A.9
-	Diesel Storage Tank (1,000 gal, portable)	LAC 33:III.501.B.5.A.3
-	Diesel Storage Tank (250 gal, portable)	LAC 33:III.501.B.5.A.3

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X. Table 1. Applicable Louisiana and Federal Air Quality Requirements

ID No.	Description	LAC 33:III Chapter																	
		5▲	509	9	11	13	15	2103	2104*	2107	2111	2115	2122	2147	22	29*	51*	53*	56
UNF 0001	VCM Plant																		
EQT 0010	CT-50 - Main Plant Cooling Tower																		
EQT 0011	CT-950 - Thermal Oxidizer Cooling Tower																		
EQT 0012	C-500 - Emergency Scrubber																		
EQT 0013	L-962 - Muriatic Acid Loading Rack																		
EQT 0014	R-201A - EDC Cracking Furnace No. 1																		
EQT 0015	R-201B - EDC Cracking Furnace No. 2																		
EQT 0016	R-201C - EDC Cracking Furnace No. 3																		
EQT 0018	T-70 - Sulfuric Acid Tank																		
EQT 0019	T-75 - Sulfuric Acid Tank																		
EQT 0020	T-82 - Gasoline Storage Tank																		
EQT 0021	S-201A - Decoking Scrubber No. 1																		
EQT 0022	S-201B - Decoking Scrubber No. 2																		
EQT 0023	S-201C - Decoking Scrubber No. 3																		
EQT 0024	T-421 - Caustic Storage Tank																		
EQT 0025	T-500 - Process Area Stormwater Tank																		
EQT 0026	T-544 - Process Area Stormwater Tank																		
EQT 0027	T-545 - Process Area Stormwater Tank																		
EQT 0028	T-547 - Stormwater / Treated Process Water Tank																		
EQT 0029	T-552 - Stormwater /Treated Process Water Tank																		
EQT 0030	T-701 - Caustic Storage Tank																		
EQT 0031	T-770 - Block 4 Stormwater Tank																		
EQT 0032	T-772 - Block 3 Stormwater Tank																		
EQT 0033	T-902 - Stormwater /Treated Process Water Tank																		
EQT 0034	T-960A - Muriatic Acid Storage Tank																		

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ID No.	Description	LAC 33:III.Chapter																	
		5▲	509	9	11	13	15	2103	2104*	2107	2111	2115	2122	2147	22	29*	51*	53*	56
EQT 0035	T-960B - Muriatic Acid Storage Tank																		1
EQT 0036	T-962A - Muriatic Acid Storage Tank																		1
EQT 0037	T-962B - Muriatic Acid Storage Tank																		1
EQT 0038	T-986 - Caustic Storage Tank																		1
EQT 0039	VS-901 - I-901 A/B Thermal Oxidizers																		1
EQT 0040	EPG-1 - Emergency Power Generator																		2
EQT 0041	EPG-2 - Emergency Power Generator																		1
EQT 0042	AIR-1 - Diesel Air Compressor No. 1																		1
EQT 0043	AIR-2 - Diesel Air Compressor No. 2																		1
EQT 0044	AIR-3 - Diesel Air Compressor No. 3																		1
EQT 0045	T-546 - Process Area Stormwater Collection Tank																		1
EQT 0046	T-101 - Reactor Crude EDC Tank																		3
EQT 0047	T-102 - Caustic Decanter																		1
EQT 0048	T-103A - Acid Wash Tank																		1
EQT 0049	T-110 - Water/EDC Separator Tank																		1
EQT 0050	T-202 - HCl Column Bottom																		3
EQT 0051	T-204 - HCl storage Tank																		1
EQT 0052	T-401A - VCM Check Sphere																		1
EQT 0053	T-401B - VCM Check Sphere																		1
EQT 0054	T-401C - VCM Check Sphere																		1
EQT 0055	T-402 - Stormwater /Process Water Storage																		1
EQT 0056	T-405 Heavy Ends Storage Tank																		1
EQT 0057	T-411A - VCM Storage Sphere																		1
EQT 0058	T-411B - VCM Storage Sphere																		1
EQT 0059	T-411C - VCM Storage Sphere																		1
EQT 0060	T-411D - VCM Storage Sphere																		1
EQT 0061	T-413 - Groundwater Tank																		1
EQT 0062	T-423 - Caustic Storage Tank																		1
EQT 0063	T-449 - Carbon Tetrachloride Tank																		1

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X. Table 1. Applicable Louisiana and Federal Air Quality Requirements

ID No.	Description	LAC 33:III.Chapter									
		5▲	509	9	11	13	15	2103	2104*	2107	2111
EQT 0064	T-450 - EDC Storage Tank										
EQT 0065	T-451 - EDC Storage Tank										
EQT 0066	T-452 - Heavy Ends Storage Tank										
EQT 0067	T-453 - Wet Ethylene Dichloride Storage Tank										
EQT 0068	T-460 - Stormwater Collection/Process										
	Wastewater Storage										
EQT 0069	T-490 - Vinyl Vent Recovery Storage										
EQT 0070	T-491 - Car Loading Recovery Storage										
EQT 0071	T-501 - Wet Vent Knock Out										
EQT 0072	T-506 - Economizer and Knock Out										
EQT 0073	T-512 - Closed Process Sewer Collection										
EQT 0074	T-514 - Closed Process Sewer Collection										
EQT 0075	T-550 - Stormwater Collection/Process										
	Wastewater Storage										
EQT 0076	T-551 - Stormwater Collection/Process										
	Wastewater Storage										
EQT 0077	T-601 - HCl Column Vent Control Storage										
EQT 0078	T-715 - Stripper Feed Phase Separator Tank										
EQT 0079	T-715S - T-715T-103A Spare Tank										
EQT 0080	T-716 - Stripper Feed Tank										
EQT 0081	T-716S - T-716T-745 Spare Tank										
EQT 0082	T-730 - ASU First Stage Neutralization Tank										
EQT 0083	T-731 - ASU Second Stage Neutralization Tank										
EQT 0084	T-745 - Chloral Conversion Phase Separator										
EQT 0085	T-746 - Chloral Conversion First Stage										
EQT 0086	T-747 - Chloral Conversion Second Stage										
EQT 0087	T-748 - Chloral Conversion Third Stage										
	Neutralization Tank										

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X. Table 1. Applicable Louisiana and Federal Air Quality Requirements

ID No.	Description	LAC 33:III.Chapter																		
		5▲	509	9	11	13	15	2103	2104*	2107	2111	2115	2122	2147	22	29*	51*	53*	56	59*
EQT 0088	T-760 - ASU Third Stage Neutralization Tank								1											
EQT 0089	T-774 - Block 34 CPS Collection Tank									1										
EQT 0090	T-785 - Chloral Conversion Retention Tank										1									
EQT 0091	T-534A - North Acid Neutralization Tank											3								
EQT 0092	T-534B - South Acid Neutralization Tank											3								
EQT 0093	S-306S - Spare Tank											1								
EQT 0094	S-309S - Spare Tank											1								
EQT 0095	S-316S-A - Spare Tank											1								
EQT 0096	S-316S-B - Spare Tank											1								
FUG 0001	FE-1 - Process Equipment Fugitives											1								
RLP 0038	VS-534 - Thermal Oxidizer Area Collection Vent Scrubber											1								
RLP 0039	F-412A,B,C,D - Tank Farm Carbon Adsorption System Vent																			
RLP 0040	LAB-002 - Southwest Vent Stack												1							
RLP 0041	LAB-CAP - Laboratory Emissions												1							
RLP 0042	C-102 - Light Ends Column												2							
RLP 0043	C-103 - Heavy Ends Column												2							
RLP 0044	C-104 - EDC Tar Still Column												2							
RLP 0045	C-202 - HCl Column												2							
RLP 0046	C-203 - Vinyl Column												2							
RLP 0047	C-204 - Tar Still Column												2							
RLP 0048	C-717 - Process Water Steam Stripper												2							
RLP 0049	C-717B - Stormwater Stripper												2							
RLP 0050	R-101 - EDC Direct Chlorination Reactor												2							
RLP 0051	R-102 - EDC Recycle Chlorinator												2							
RLP 0052	R-300 - Acetylene Hydrogenator												2							
RLP 0053	R-301/302/303 - Oxychlorination Reactors												2							

* The regulations indicated above are State Only regulations.

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- ▲ All LAC 33:III Chapter 5 citations are federally enforceable including LAC 33:III.501.C.6 citations, except when the requirement found in the "Specific Requirements" report specifically states that the regulation is State Only.

KEY TO MATRIX

- 1 -The regulations have applicable requirements that apply to this particular emission source.
-The emission source may have an exemption from control stated in the regulation. The emission source may not have to be controlled but may have monitoring, recordkeeping, or reporting requirements.
- 2 -The regulations have applicable requirements that apply to this particular emission source but the source is currently exempt from these requirements due to meeting a specific criterion, such as it has not been constructed, modified or reconstructed since the regulations have been in place. If the specific criteria changes the source will have to comply at a future date.
- 3 -The regulations apply to this general type of emission source (i.e. vents, furnaces, towers, and fugitives) but do not apply to this particular emission source.

Blank – The regulations clearly do not apply to this type of emission source.

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X. Table 1. Applicable Louisiana and Federal Air Quality Requirements

ID No.	Description	40 CFR 60 NSPS						40 CFR 61						40 CFR 63 NESHAP						40 CFR		
		A	K _b	V	K _b	N ₂	R _b	III	A	F	M	V	E	A	F	G	H	ZZZ	86	82		
UNF 0001	VCM Plant	1																			-	-
EQT 0010	CT-50 - Main Plant Cooling Tower																				-	-
EQT 0011	CT-950 - Thermal Oxidizer Cooling Tower																				-	-
EQT 0012	C-500 - Emergency Scrubber																				-	-
EQT 0013	L-962 - Muriatic Acid Loading Rack																				-	-
EQT 0014	R-201A - EDC Cracking Furnace No. 1																				-	-
EQT 0015	R-201B - EDC Cracking Furnace No. 2																				-	-
EQT 0016	R-201C - EDC Cracking Furnace No. 3																				-	-
EQT 0018	T-70 - Sulfuric Acid Tank																				-	-
EQT 0019	T-75 - Sulfuric Acid Tank																				-	-
EQT 0020	T-82 - Gasoline Storage Tank	3																			-	-
EQT 0021	S-201A - Decoking Scrubber No. 1																				-	-
EQT 0022	S-201B - Decoking Scrubber No. 2																				-	-
EQT 0023	S-201C - Decoking Scrubber No. 3																				-	-
EQT 0024	T-421 - Caustic Storage Tank																				-	-
EQT 0025	T-500 - Process Area Stormwater Tank																				-	-
EQT 0026	T-544 - Process Area Stormwater Tank																				-	-
EQT 0027	T-545 - Process Area Stormwater Tank																				-	-
EQT 0028	T-547 - Stormwater /Treated Process Water Tank																				-	-
EQT 0029	T-552 - Stormwater /Treated Process Water Tank																				-	-
EQT 0030	T-701 - Caustic Storage Tank																				-	-
EQT 0031	T-770 - Block 4 Stormwater Tank																				-	-
EQT 0032	T-772 - Block 3 Stormwater Tank																				-	-
EQT 0033	T-902 - Stormwater /Treated Process Water Tank																				-	-
EQT 0034	T-960A - Muriatic Acid Storage Tank																				-	-

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X. Table 1. Applicable Louisiana and Federal Air Quality Requirements

ID No.	Description	40 CFR 60 NSPS						40 CFR 61						40 CFR 63 NESHAP						40 CFR	
		A	K _d	V _b	K _b	Z	R _R	III	A	F	M	V	F _F	A	F	G	H	ZZZ	88	82	
EQT 0035	T-960B - Muratic Acid Storage Tank																				
EQT 0036	T-962A - Muratic Acid Storage Tank																				
EQT 0037	T-962B - Muratic Acid Storage Tank																				
EQT 0038	T-986 - Caustic Storage Tank	3																			
EQT 0039	VS-901 - I-901 A/B Thermal Oxidizers		1																		
EQT 0040	EPG-1 - Emergency Power Generator																			3	
EQT 0041	EPG-2 - Emergency Power Generator																			3	
EQT 0042	AIR-1 - Diesel Air Compressor No. 1																			1	
EQT 0043	AIR-2 - Diesel Air Compressor No. 2																			1	
EQT 0044	AIR-3 - Diesel Air Compressor No. 3																			3	
EQT 0045	T-546 - Process Area Stormwater Collection Tank																				
EQT 0046	T-101 - Reactor Crude EDC Tank																			3	
EQT 0047	T-102 - Caustic Decanter		1																	1	
EQT 0048	T-103A - Acid Wash Tank																			1	
EQT 0049	T-110 - Water/EDC Separator Tank																			3	
EQT 0050	T-202 - HCl Column Bottom																			3	
EQT 0051	T-204 - HCl storage Tank																			3	
EQT 0052	T-401A - VCM Check Sphere																			3	
EQT 0053	T-401B - VCM Check Sphere																			3	
EQT 0054	T-401C - VCM Check Sphere																			3	
EQT 0055	T-402 - Stormwater /Process Water Storage																			3	
EQT 0056	T-405 - Heavy Ends Storage Tank																			1	
EQT 0057	T-411A - VCM Storage Sphere																			3	
EQT 0058	T-411B - VCM Storage Sphere																			3	
EQT 0059	T-411C - VCM Storage Sphere																			3	
EQT 0060	T-411D - VCM Storage Sphere																			3	
EQT 0061	T-413 - Groundwater Tank		1																	1	

LOUISIANA DEPARTMENT OF ENVIRONMENTAL QUALITY

Georgia Gulf Lake Charles LLC - VCM Plant
Agency Interest No.: 4013
Georgia Gulf Lake Charles LLC
Westlake Calcasieu Parish, Louisiana

X. Table 1. Applicable Louisiana and Federal Air Quality Requirements

ID No.	Description	40 CFR 60 NSPS			40 CFR 61			40 CFR 63 NESHAP			40 CFR		
		A	B	C	D	E	F	G	H	I	J	K	L
EQT 0062	T-423 - Caustic Storage Tank				1								
EQT 0063	T-449 Carbon Tetrachloride Tank												3
EQT 0064	T-450 - EDC Storage Tank				1								1
EQT 0065	T-451 - EDC Storage Tank				1								1
EQT 0066	T-452 - Heavy Ends Storage Tank				1								
EQT 0067	T-453 - Wet Ethylene Dichloride Storage Tank				1								
EQT 0068	T-460 - Stormwater Collection/Process				1								
	Wastewater Storage												
EQT 0069	T-490 - Vinyl Vent Recovery Storage												3
EQT 0070	T-491 - Car Loading Recovery Storage												3
EQT 0071	T-501 - Wet Vent Knock Out												3
EQT 0072	T-506 - Economizer and Knock Out												3
EQT 0073	T-512 - Closed Process Sewer Collection				1								1
EQT 0074	T-514 - Closed Process Sewer Collection												3
EQT 0075	T-550 - Stormwater Collection/Process				1								1
	Wastewater Storage												
EQT 0076	T-551 - Stormwater Collection/Process				1								1
	Wastewater Storage												
EQT 0077	T-601 - HCl Column Vent Control Storage				3								3
EQT 0078	T-715 - Stripper Feed Phase Separator Tank				1								1
EQT 0079	T-715S - T-715/T-103A Spare Tank				1								1
EQT 0080	T-716 - Stripper Feed Tank												3
EQT 0081	T-716S - T-716/T-745 Spare Tank												3
EQT 0082	T-730 - ASU First Stage Neutralization Tank												3
EQT 0083	T-731 - ASU Second Stage Neutralization Tank												3
EQT 0084	T-745 - Chloral Conversion Phase Separator												3

LOUISIANA DEPARTMENT OF ENVIRONMENTAL QUALITY

Georgia Gulf Lake Charles LLC - VCM Plant
Agency Interest No.: 4013
Georgia Gulf Lake Charles LLC
Westlake Calcasieu Parish, Louisiana

X. Table 1. Applicable Louisiana and Federal Air Quality Requirements

ID No.	Description	40 CFR 60 NSPS						40 CFR 61						40 CFR 63 NESHAP						40 CFR		
		A	K _d	V	K _d	Z	R _R	III	A	F	M	V	F	A	G	H	ZZZZ	82	68			
EQT 0085	T-746 - Chloral Conversion First Stage Neutralization Tank																				3	
EQT 0086	T-747 - Chloral Conversion Second Stage Neutralization Tank																				3	
EQT 0087	T-748 - Chloral Conversion Third Stage Neutralization Tank																				3	
EQT 0088	T-760 - ASU Third Stage Neutralization Tank																				3	
EQT 0089	T-774 - Block 3/4 CPS Collection Tank																				3	
EQT 0090	T-785 - Chloral Conversion Retention Tank																				3	
EQT 0091	T-534A - North Acid Neutralization Tank																				3	
EQT 0092	T-534B - South Acid Neutralization Tank																				3	
EQT 0093	S-306S - Spare Tank																				3	
EQT 0094	S-309S - Spare Tank																				3	
EQT 0095	S-316S-A - Spare Tank																				3	
EQT 0096	S-316S-B - Spare Tank																				3	
FUG 0001	FE-1 - Process Equipment Fugitives																				1	
RLP 0038	VS-534 - Thermal Oxidizer Area Collection Vent Scrubber																				1	
RLP 0039	F-412A,B,C,D - Tank Farm Carbon Adsorption System Vent																				1	
RLP 0040	LAB-002 - Southwest Vent Stack																				1	
RLP 0041	LAB-CAP - Laboratory Emissions																				1	
RLP 0042	C-102 - Light Ends Column																				1	
RLP 0043	C-103 - Heavy Ends Column																				1	
RLP 0044	C-104 - EDC Tar Still Column																				1	
RLP 0045	C-202 - HCl Column																				1	
RLP 0046	C-203 - Vinyl Column																				1	
RLP 0047	C-204 - Tar Still Column																				1	

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Georgia Gulf Lake Charles LLC - VCM Plant
Agency Interest No.: 4013
Georgia Gulf Lake Charles LLC
Westlake Calcasieu Parish, Louisiana

X. Table 1. Applicable Louisiana and Federal Air Quality Requirements

ID No.	Description	40 CFR 60 NSPS				40 CFR 61				40 CFR 63 NESHAP				40 CFR			
		A	K _d	V _v	K _b	Z	R _R	III	A	M	Z	V	F _E	A	G	H	
RLP 0048	C-717 - Process Water Steam Stripper																82
RLP 0049	C-717B - Stormwater Stripper																89
RLP 0050	R-101 EDC Direct Chlorination Reactor																
RLP 0051	R-102 - EDC Recycle Chlorinator																
RLP 0052	R-300 - Acetylene Hydrogenator																
RLP 0053	R-301/302/303 - Oxychlorination Reactors																

KEY TO MATRIX

- 1 - The regulations have applicable requirements that apply to this particular emission source.
- The emission source may have an exemption from control stated in the regulation. The emission source may not have to be controlled but may have monitoring, recordkeeping, or reporting requirements.
- 2 - The regulations have applicable requirements that apply to this particular emission source but the source is currently exempt from these requirements due to meeting a specific criterion, such as it has not been constructed, modified or reconstructed since the regulations have been in place. If the specific criteria changes the source will have to comply at a future date.
- 3 - The regulations apply to this general type of emission source (i.e. vents, furnaces, towers, and fugitives) but do not apply to this particular emission source.

Blank – The regulations clearly do not apply to this type of emission source.

LOUISIANA DEPARTMENT OF ENVIRONMENTAL QUALITY

Georgia Gulf Lake Charles LLC - VCM Plant
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XI. Table 2. Explanation for Exemption Status or Non-Applicability of a Source

ID No.	Requirement	Notes
EQT0012	Waste Gas Disposal [LAC 33:III.2115]	Exempt – The combined weight of VOCs is not over 100 pounds in any 24-hour period.
EQT0014, EQT0015, EQT0016	Emission Standards for Sulfur Dioxide [LAC 33:III.1502]	Does not apply – SO ₂ emissions from each point source are less than 5 tons per year.
EQT0020, EQT0048	NSPS Subpart Kb – Petroleum Liquid Storage Vessels [40 CFR 60.110b]	Does not apply – Tank capacity is less than 75 m ³ .
EQT0024 through EQT0029, EQT0031, EQT0032, EQT0033, EQT0045	Storage of volatile Organic Compounds [LAC 33:III.2103]	Does not apply – Not for VOL storage.
EQT0030, EQT0038	NSPS Subpart Kb – Standards of Performance for VOL Storage Vessels [40 CFR 60.110b]	Does not apply – Not for VOL storage.
EQT0039, RLP0042 through RLP0053	Storage of volatile Organic Compounds [LAC 33:III.2103]	Does not apply – Not for VOL storage.
EQT0040, EQT0041, EQT0044	NSPS Subpart G – Process Vents, Storage Vessels, Transfer Operations, and Wastewater [40 CFR 63.100]	Does not apply – The capacity of each tank is less than 38 m ³ .
EQT0042, EQT0043	SOCMI Reactor Processes and Distillation Operations [LAC 33:III.2147]	Exempt – Subject to the requirements of 40 CFR 63 Subpart G.
EQT0046, EQT0049, EQT0050, EQT0069, EQT0070, EQT0071, EQT0072, EQT0074, EQT0080 through EQT0088, EQT0093 through EQT0096	HON Subpart G – Process Vents, Storage Vessels, Transfer Operations, and Wastewater [40 CFR 63.100]	Does not apply – SO ₂ emissions from each point source are less than 5 tons per year.
EQT0051, EQT0052, EQT0053, EQT0057, EQT0058, EQT0059, EQT0060, EQT0077	NSPS Subpart Kb – Petroleum Liquid Storage Vessels [40 CFR 60.110b]	Does not apply – Operate at pressures in excess of 204.9 kPa without emissions to the atmosphere.
	HON Subpart G – Process Vents, Storage Vessels, Transfer Operations, and Wastewater [40 CFR 63.100]	

LOUISIANA DEPARTMENT OF ENVIRONMENTAL QUALITY

Georgia Gulf Lake Charles LLC - VCM Plant
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Georgia Gulf Lake Charles LLC
Westlake Calcasieu Parish, Louisiana

XI. Table 2. Explanation for Exemption Status or Non-Applicability of a Source

ID No.	Requirement	Notes
EQT0063	HON Subpart G - Process Vents, Storage Vessels, Transfer Operations, and Wastewater [40 CFR 63.100]	Does not apply - The capacity of each tank is less than 38 m ³ .
EQT0091, EQT0092	Storage of volatile Organic Compounds [LAC 33:III.2103]	Does not apply - Not for VOL storage.

The above table provides explanation for both the exemption status and non-applicability of a source cited by 1, 2 or 3 in the matrix presented in Section X (Table 1) of this permit.

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- A. The term of this permit shall be five (5) years from date of issuance. An application for a renewal of this 40 CFR Part 70 permit shall be submitted to the administrative authority no later than six months prior to the permit expiration date. Should a complete permit application not be submitted six months prior to the permit expiration date, a facility's right to operate is terminated pursuant to 40 CFR Section 70.7(c)(ii). Operation may continue under the conditions of this permit during the period of the review of the application for renewal. [LAC 33:III.507.E.1, E.3, E.4, reference 40 CFR 70.6(a)(2)]
- B. The conditions of this permit are severable; and if any provision of this permit or the application of any provision of this permit to any circumstance is held invalid, the application of such provision to other circumstances, and the remainder of this permit, shall not be affected thereby. [Reference 40 CFR 70.6(a)(5)]
- C. Permittee shall comply with all conditions of the 40 CFR Part 70 permit. Any permit noncompliance constitutes a violation of the Clean Air Act and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application. This permit may be modified, revoked, reopened and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any permit condition. [LAC 33:III.507.B.2, reference 40 CFR 70.6(a)(6)(i) & (iii)]
- D. It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit. [Reference 40 CFR 70.6(a)(6)(ii)]
- E. This permit does not convey any property rights of any sort, or an exclusive privilege. [Reference 40 CFR 70.6(a)(6)(iv)]
- F. The permittee shall furnish to the permitting authority, within a reasonable time, any information that the permitting authority may request in writing to determine whether cause exists for modifying, revoking, and reissuing, or terminating the permit or to determine compliance with the permit. Upon request, the permittee shall also furnish to the permitting authority copies of records required to be kept by the permit or, for information claimed to be confidential, the permittee may furnish such records directly to the Administrator along with a claim of confidentiality. A claim of confidentiality does not relieve the permittee of the requirement to provide the information. [LAC 33:III.507.B.2, 517.F, reference 40 CFR 70.6(a)(6)(v)]
- G. Permittee shall pay fees in accordance with LAC 33:III.Chapter 2 and 40 CFR Section 70.6(a)(7). [LAC 33:III.501.C.2, reference 40 CFR 70.6(a)(7)]
- H. Upon presentation of credentials and other documents as may be required by law, the permittee shall allow the permitting authority or authorized representative to perform the following:
 1. enter upon the permittee's premises where a 40 CFR Part 70 source is located or emission-related activity is conducted, or where records must be kept under the conditions of the permit [LAC 33:III.507.H.2, reference 40 CFR 70.6(c)(2)(i)];

40 CFR PART 70 GENERAL CONDITIONS

2. have access to and copy, at reasonable times, any records that must be kept under the conditions of the permit [LAC 33:III.507.H.2, reference 40 CFR 70.6(c)(2)(ii)];
 3. inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit [LAC 33:III.507.H.2, reference 40 CFR 70.6(c)(2)(iii)]; and
 4. as authorized by the Clean Air Act, sample or monitor at reasonable times substances or parameters for the purpose of assuring compliance with the permit or applicable requirements. [LAC 33:III.507.H.2, reference 40 CFR 70.6(c)(2)(iv)]
- I. All required monitoring data and supporting information shall be kept available for inspection at the facility or alternate location approved by the agency for a period of at least five (5) years from the date of the monitoring sample, measurement, report, or application. Supporting information includes calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and all reports required by the permit.
[Reference 40 CFR 70.6(a)(3)(ii)(B)]
- J. Records of required monitoring shall include the following:
1. the date, place as defined in the permit, and time of sampling or measurements;
 2. the date(s) analyses were performed;
 3. the company or entity that performed the analyses;
 4. the analytical techniques or methods used;
 5. the results of such analyses; and
 6. the operating conditions as existing at the time of sampling or measurement.
- [Reference 40 CFR 70.6(a)(3)(ii)(A)]
- K. Permittee shall submit at least semiannually, reports of any required monitoring, clearly identifying all instances of deviations from permitted monitoring requirements, certified by a responsible company official. For previously reported deviations, in lieu of attaching the individual deviation reports, the semiannual report may clearly reference the communication(s)/correspondence(s) constituting the prior report, including the date the prior report was submitted. The semiannual reports shall be submitted to the Office of Environmental Compliance, Enforcement Division by March 31 for the preceding period encompassing July through December and September 30 for the preceding period encompassing January through June. Any quarterly deviation report required to be submitted by March 31 or September 30 in accordance with Part 70 General Condition R may be consolidated with the semi-annual reports required by this general condition as long as the report clearly indicates this and all required information is included and clearly delineated in the consolidated report. [LAC 33:III.507.H, reference 40 CFR 70.6(a)(3)(iii)(A)]
- L. The permittee shall submit at least semiannual reports on the status of compliance pursuant to 40 CFR Section 70.5 (c) (8) and a progress report on any applicable schedule of compliance pursuant to 40 CFR Section 70.6 (c) (4). [LAC 33:III.507.H.1, reference 40 CFR 70.6(c)(4)]

40 CFR PART 70 GENERAL CONDITIONS

- M. Compliance certifications per LAC 33:III.507.H.5 shall be submitted to the Administrator as well as the permitting authority. For previously reported compliance deviations, in lieu of attaching the individual deviation reports, the annual report may clearly reference the communication(s)/correspondence(s) constituting the prior report, including the date the prior report was submitted. The compliance certifications shall be submitted to the Office of Environmental Compliance, Enforcement Division by March 31 for the preceding calendar year. [LAC 33:III.507.H.5, reference 40 CFR 70.6(c)(5)(iv)]
- N. If the permittee seeks to reserve a claim of an affirmative defense as provided in LAC 33:III.507.J.2, the permittee shall, in addition to any emergency or upset provisions in any applicable regulation, notify the permitting authority within 2 working days of the time when emission limitations were exceeded due to the occurrence of an upset. In the event of an upset, as defined under LAC 33:III.507.J, which results in excess emissions, the permittee shall demonstrate through properly signed, contemporaneous operating logs, or other relevant evidence that: 1) an emergency occurred and the cause was identified; 2) the permitted facility was being operated properly at the time; and 3) during the emergency the permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standard or requirement of the permit. [LAC 33:III.507.J.2, reference 40 CFR 70.6(g)(3)(iv) & (i-iii)]
- O. Permittee shall maintain emissions at a level less than or equal to that provided for under the allowances that the 40 CFR Part 70 source lawfully holds under Title IV of the Clean Air Act or the regulations promulgated thereunder. No permit revision shall be required for increases in emissions that are authorized by allowances acquired pursuant to the acid rain program, provided that such increases do not require a permit revision under any other applicable requirement. No limit shall be placed on the number of allowances held by the source. The source may not, however, use allowances as a defense to noncompliance with any other applicable requirement. Any such allowance shall be accounted for according to the procedures established in regulations promulgated under Title IV of the Clean Air Act. [Reference 40 CFR 70.6(a)(4)]
- P. Any permit issued pursuant to 40 CFR Part 70 may be subject to reopening prior to the expiration of the permit for any of the conditions specified in 40 CFR Section 70.7(f) or LAC 33:III.529. [LAC 33:III.529.A-B, reference 40 CFR 70.7(f)]
- Q. Permittee may request an administrative amendment to the permit to incorporate test results from compliance testing if the following criteria are met:
 1. the changes are a result of tests performed upon start-up of newly constructed, installed, or modified equipment or operations;
 2. increases in permitted emissions will not exceed five tons per year for any regulated pollutant;
 3. increases in permitted emissions of Louisiana toxic air pollutants or of federal hazardous air pollutants would not constitute a modification under LAC 33:III. Chapter 51 or under Section 112 (g) of the Clean Air Act;

40 CFR PART 70 GENERAL CONDITIONS

4. changes in emissions would not require new source review for prevention of significant deterioration or nonattainment and would not trigger the applicability of any federally applicable requirement;
 5. changes in emissions would not qualify as a significant modification; and
 6. the request is submitted no later than 12 months after commencing operation. [LAC 33:III.523.A, reference 40 CFR 70.7(d)]
- R. Permittee shall submit prompt reports of all permit deviations as specified below to the Office of Environmental Compliance, Enforcement Division. All such reports shall be certified by a responsible official in accordance with 40 CFR 70.5(d).
1. A written report shall be submitted within 7 days of any emission in excess of permit requirements by an amount greater than the Reportable Quantity established for that pollutant in LAC 33.I.Chapter 39.
 2. A written report shall be submitted within 7 days of the initial occurrence of any emission in excess of permit requirements, regardless of the amount, where such emission occurs over a period of seven days or longer.
 3. A written report shall be submitted quarterly to address all permit deviations not included in paragraphs 1 or 2 above. Unless required by an applicable reporting requirement, a written report is not required during periods in which there is no deviation. The quarterly deviation reports submitted on March 31 and September 30 may be consolidated with the semi-annual reports required by Part 70 General Condition K as long as the report clearly indicates this and all required information is included and clearly delineated in the consolidated report. For previously reported permit deviations, in lieu of attaching the individual deviation reports, the quarterly report may clearly reference the communication(s)/correspondence(s) constituting the prior report, including the date the prior report was submitted. The schedule for submittal of quarterly reports shall be no later than the dates specified below for any permit deviations occurring during the corresponding specified calendar quarter:
 - a. Report by June 30 to cover January through March
 - b. Report by September 30 to cover April through June
 - c. Report by December 31 to cover July through September
 - d. Report by March 31 to cover October through December
 4. Any written report submitted in advance of the timeframes specified above, in accordance with an applicable regulation, may serve to meet the reporting requirements of this condition provided such reports are certified in accordance with 40 CFR 70.5(d) and contain all information relevant to the permit deviation. Reporting under this condition does not relieve the permittee from the reporting requirements of any applicable regulation, including LAC 33.I.Chapter 39, LAC 33.III.Chapter 9, and LAC 33.III.5107. [Reference 40 CFR 70.6(a)(3)(iii)(B)]

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- S. Permittee shall continue to comply with applicable requirements on a timely basis, and will meet on a timely basis applicable requirements that become effective during the permit term. [Reference 40 CFR 70.5(c)(8)(iii)]
- T. The permittee shall comply with the standards for recycling and emissions reduction pursuant to 40 CFR Part 82, Subpart F, except as provided for Motor Vehicle Air Conditioners (MVACs) in Subpart B:
 1. Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices pursuant to 40 CFR 82.156;
 2. Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to 40 CFR 82.158;
 3. Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program pursuant to 40 CFR 82.161;
 4. Persons disposing of small appliances, MVACs, and MVAC-like appliances must comply with recordkeeping requirements pursuant to 40 CFR 82.166. ("MVAC-like appliance" as defined at 40 CFR 82.152);
 5. Persons owning commercial or industrial process refrigeration equipment must comply with the leak repair requirements pursuant to 40 CFR 82.156; and
 6. Owners/operators of appliances normally containing 50 or more pounds of refrigerant must keep records of refrigerant purchased and added to such appliances pursuant to 40 CFR 82.166. [Reference 40 CFR 82, Subpart F]
- U. If the permittee performs a service on motor (fleet) vehicles when this service involves ozone-depleting substance refrigerant (or regulated substitute substance) in the motor vehicle air conditioner (MVAC), the permittee is subject to all the applicable requirements as specified in 40 CFR Part 82, Subpart B, Servicing of Motor Vehicle Air Conditioners.

The term "motor vehicle" as used in Subpart B does not include a vehicle in which final assembly of the vehicle has not been completed. The term "MVAC" as used in Subpart B does not include the air-tight sealed refrigeration system used as refrigerated cargo, or system used on passenger buses using HCFC-22 refrigerant. [Reference 40 CFR 82, Subpart B]
- V. Data availability for continuous monitoring or monitoring to collect data at specific intervals: Except for monitoring malfunctions, associated repairs, and required quality assurance or control activities (including calibration checks and required zero and span adjustments), the permittee shall conduct all monitoring in continuous operation (or shall collect data at all required intervals) at all times that the emissions unit is operating. For purposes of reporting monitoring deviations under Part 70 General Conditions K and R, and unless otherwise provided for in the Specific Requirements (or Table 3) of this permit, the minimum degree of data availability shall be at least 90% (based on a monthly average) of the operating time of the emissions unit or activity being monitored. This condition does not apply to Leak Detection and Repair (LDAR) programs for fugitive emissions (e.g., 40 CFR 60 Subpart VV, 40 CFR 63 Subpart H).

LOUISIANA AIR EMISSION PERMIT GENERAL CONDITIONS

- I. This permit is issued on the basis of the emissions reported in the application for approval of emissions and in no way guarantees that the design scheme presented will be capable of controlling the emissions to the type and quantities stated. Failure to install, properly operate and/or maintain all proposed control measures and/or equipment as specified in the application and supplemental information shall be considered a violation of the permit and LAC 33:III.501. If the emissions are determined to be greater than those allowed by the permit (e.g. during the shakedown period for new or modified equipment) or if proposed control measures and/or equipment are not installed or do not perform according to design efficiency, an application to modify the permit must be submitted. All terms and conditions of this permit shall remain in effect unless and until revised by the permitting authority.
- II. The permittee is subject to all applicable provisions of the Louisiana Air Quality Regulations. Violation of the terms and conditions of the permit constitutes a violation of these regulations.
- III. The Emission Rates for Criteria Pollutants, Emission Rates for TAP/HAP & Other Pollutants, and Specific Requirements sections or, where included, Emission Inventory Questionnaire sheets establish the emission limitations and are a part of the permit. Any operating limitations are noted in the Specific Requirements or, where included, Tables 2 and 3 of the permit. The synopsis is based on the application and Emission Inventory Questionnaire dated October 29, 2008.
- IV. This permit shall become invalid, for the sources not constructed, if:
 - A. Construction is not commenced, or binding agreements or contractual obligations to undertake a program of construction of the project are not entered into, within two (2) years (18 months for PSD permits) after issuance of this permit, or;
 - B. If construction is discontinued for a period of two (2) years (18 months for PSD permits) or more.The administrative authority may extend this time period upon a satisfactory showing that an extension is justified.

This provision does not apply to the time period between constructions of the approved phases of a phased construction project. However, each phase must commence construction within two (2) years (18 months for PSD permits) of its projected and approved commencement date.
- V. The permittee shall submit semiannual reports of progress outlining the status of construction, noting any design changes, modifications or alterations in the construction schedule which have or may have an effect on the emission rates or ambient air quality levels. These reports shall continue to be submitted until such time as construction is certified as being complete. Furthermore, for any significant change in the design, prior approval shall be obtained from the Office of Environmental Services, Air Permits Division.

LOUISIANA AIR EMISSION PERMIT GENERAL CONDITIONS

- VI. The permittee shall notify the Department of Environmental Quality, Office of Environmental Services, Air Permits Division within ten (10) calendar days from the date that construction is certified as complete and the estimated date of start-up of operation. The appropriate Regional Office shall also be so notified within the same time frame.
- VII. Any emissions testing performed for purposes of demonstrating compliance with the limitations set forth in paragraph III shall be conducted in accordance with the methods described in the Specific Conditions and, where included, Tables 1, 2, 3, 4, and 5 of this permit. Any deviation from or modification of the methods used for testing shall have prior approval from the Office of Environmental Assessment, Air Quality Assessment Division.
- VIII. The emission testing described in paragraph VII above, or established in the specific conditions of this permit, shall be conducted within sixty (60) days after achieving normal production rate or after the end of the shakedown period, but in no event later than 180 days after initial start-up (or restart-up after modification). The Office of Environmental Assessment, Air Quality Assessment Division shall be notified at least (30) days prior to testing and shall be given the opportunity to conduct a pretest meeting and observe the emission testing. The test results shall be submitted to the Air Quality Assessment Division within sixty (60) days after the complete testing. As required by LAC 33.III.913, the permittee shall provide necessary sampling ports in stacks or ducts and such other safe and proper sampling and testing facilities for proper determination of the emission limits.
- IX. The permittee shall, within 180 days after start-up and shakedown of each project or unit, report to the Office of Environmental Compliance, Enforcement Division any significant difference in operating emission rates as compared to those limitations specified in paragraph III. This report shall also include, but not be limited to, malfunctions and upsets. A permit modification shall be submitted, if necessary, as required in Condition I.
- X. The permittee shall retain records of all information resulting from monitoring activities and information indicating operating parameters as specified in the specific conditions of this permit for a minimum of at least five (5) years.
- XI. If for any reason the permittee does not comply with, or will not be able to comply with, the emission limitations specified in this permit, the permittee shall provide the Office of Environmental Compliance, Enforcement Division with a written report as specified below.
 - A. A written report shall be submitted within 7 days of any emission in excess of permit requirements by an amount greater than the Reportable Quantity established for that pollutant in LAC 33.I.Chapter 39.
 - B. A written report shall be submitted within 7 days of the initial occurrence of any emission in excess of permit requirements, regardless of the amount, where such emission occurs over a period of seven days or longer.

LOUISIANA AIR EMISSION PERMIT GENERAL CONDITIONS

- C. A written report shall be submitted quarterly to address all emission limitation exceedances not included in paragraphs A or B above. The schedule for submittal of quarterly reports shall be no later than the dates specified below for any emission limitation exceedances occurring during the corresponding specified calendar quarter:
 - 1. Report by June 30 to cover January through March
 - 2. Report by September 30 to cover April through June
 - 3. Report by December 31 to cover July through September
 - 4. Report by March 31 to cover October through December
 - D. Each report submitted in accordance with this condition shall contain the following information:
 - 1. Description of noncomplying emission(s);
 - 2. Cause of noncompliance;
 - 3. Anticipated time the noncompliance is expected to continue, or if corrected, the duration of the period of noncompliance;
 - 4. Steps taken by the permittee to reduce and eliminate the noncomplying emissions; and
 - 5. Steps taken by the permittee to prevent recurrences of the noncomplying emissions.
 - E. Any written report submitted in advance of the timeframes specified above, in accordance with an applicable regulation, may serve to meet the reporting requirements of this condition provided all information specified above is included. For Part 70 sources, reports submitted in accordance with Part 70 General Condition R shall serve to meet the requirements of this condition provided all specified information is included. Reporting under this condition does not relieve the permittee from the reporting requirements of any applicable regulation, including LAC 33.I.Chapter 39, LAC 33.III.Chapter 9, and LAC 33.III.5107.
- XII. Permittee shall allow the authorized officers and employees of the Department of Environmental Quality, at all reasonable times and upon presentation of identification, to:
- A. Enter upon the permittee's premises where regulated facilities are located, regulated activities are conducted or where records required under this permit are kept;
 - B. Have access to and copy any records that are required to be kept under the terms and conditions of this permit, the Louisiana Air Quality Regulations, or the Act;
 - C. Inspect any facilities, equipment (including monitoring methods and an operation and maintenance inspection), or operations regulated under this permit; and
 - D. Sample or monitor, for the purpose of assuring compliance with this permit or as otherwise authorized by the Act or regulations adopted thereunder, any substances or parameters at any location.

LOUISIANA AIR EMISSION PERMIT GENERAL CONDITIONS

- XIII. If samples are taken under Section XII.D. above, the officer or employee obtaining such samples shall give the owner, operator or agent in charge a receipt describing the sample obtained. If requested prior to leaving the premises, a portion of each sample equal in volume or weight to the portion retained shall be given to the owner, operator or agent in charge. If an analysis is made of such samples, a copy of the analysis shall be furnished promptly to the owner, operator or agency in charge.
- XIV. The permittee shall allow authorized officers and employees of the Department of Environmental Quality, upon presentation of identification, to enter upon the permittee's premises to investigate potential or alleged violations of the Act or the rules and regulations adopted thereunder. In such investigations, the permittee shall be notified at the time entrance is requested of the nature of the suspected violation. Inspections under this subsection shall be limited to the aspects of alleged violations. However, this shall not in any way preclude prosecution of all violations found.
- XV. The permittee shall comply with the reporting requirements specified under LAC 33:III.919 as well as notification requirements specified under LAC 33:III.927.
- XVI. In the event of any change in ownership of the source described in this permit, the permittee and the succeeding owner shall notify the Office of Environmental Services in accordance with LAC 33:I.Chapter 19.Facility Name and Ownership/Operator Changes Process.
- XVII. Very small emissions to the air resulting from routine operations, that are predictable, expected, periodic, and quantifiable and that are submitted by the permitted facility and approved by the Air Permits Division are considered authorized discharges. Approved activities are noted in the General Condition XVII Activities List of this permit. To be approved as an authorized discharge, these very small releases must:
1. Generally be less than 5 TPY
 2. Be less than the minimum emission rate (MER)
 3. Be scheduled daily, weekly, monthly, etc., or
 4. Be necessary prior to plant startup or after shutdown [line or compressor pressuring/depressuring for example]
- These releases are not included in the permit totals because they are small and will have an insignificant impact on air quality. This general condition does not authorize the maintenance of a nuisance, or a danger to public health and safety. The permitted facility must comply with all applicable requirements, including release reporting under LAC 33:I.3901.
- XVIII. Provisions of the permit may be appealed to the secretary in writing pursuant to La. R.S. 30:2024(A) within 30 days from notice of the permit action. A request may be made to the secretary to suspend those provisions of the permit specifically appealed. The permit remains in effect to the extent that the secretary or assistant secretary does not elect to suspend the appealed provisions as requested or, at his discretion, other permit provisions as well. Construction cannot proceed, except as specifically approved by the secretary or

LOUISIANA AIR EMISSION PERMIT GENERAL CONDITIONS

assistant secretary, until a final decision has been rendered on the appeal. A request for hearing must be sent to the Office of the Secretary. A request for hearing must be sent to the following:

Attention: Office of the Secretary, Legal Services Division
La. Dept. of Environmental Quality
Post Office Box 4302
Baton Rouge, Louisiana 70821-4302

- XIX. For Part 70 sources, certain Part 70 general conditions may duplicate or conflict with state general conditions. To the extent that any Part 70 conditions conflict with state general conditions, then the Part 70 general conditions control. To the extent that any Part 70 general conditions duplicate any state general conditions, then such state and Part 70 provisions will be enforced as if there is only one condition rather than two conditions.

INVENTORIES

AI ID: 4013 - Georgia Gulf Charles LLC - VCM Plant
 Activity Number: PER20080004
 Permit Number: 0520-00012-V1
 Air - Title V Regular Permit Minor Mod

Subject Item Inventory:

ID	Description	Tank Volume	Max. Operating Rate	Normal Operating Rate	Contents	Operating Time
VCM Plant						
EQT 0010	CT-50 - Main Plant Cooling Tower		74000 gallons/min	74000 gallons/min		8760 hr/yr
EQT 0011	CT-950 - Thermal Oxidizer Cooling Tower		7000 gallons/min	7000 gallons/min		8760 hr/yr
EQT 0012	C-500 - Emergency Scrubber				(None Specified)	
EQT 0013	L-982 - Muriatic Acid Loading Rack	190 gallons/min	190 gallons/min	190 gallons/min	2912 hr/min	
EQT 0014	R-201A - EDC Cracking Furnace No. 1	74 MM BTU/hr	74 MM BTU/hr	63 MM BTU/hr	8760 hr/yr	
EQT 0015	R-201B - EDC Cracking Furnace No. 2	74 MM BTU/hr	74 MM BTU/hr	63 MM BTU/hr	8760 hr/yr	
EQT 0016	R-201C - EDC Cracking Furnace No. 3	84 MM BTU/hr	84 MM BTU/hr	73 MM BTU/hr	8760 hr/yr	
EQT 0018	T-70 - Sulfuric Acid Tank	2885 gallons			8760 hr/yr	
EQT 0019	T-75 - Sulfuric Acid Tank	264 gallons			8760 hr/yr	
EQT 0020	T-82 - Gasoline Storage Tank	550 gallons			8760 hr/yr	
EQT 0021	S-201A - Decoking Scrubber No. 1				15620 gallons/yr	
EQT 0022	S-201B - Decoking Scrubber No. 2				288 hr/yr	
EQT 0023	S-201C - Decoking Scrubber No. 3				288 hr/yr	
EQT 0024	T-421 - Caustic Storage Tank	20000 gallons		16.7 MM gallons/yr	8760 hr/yr	
EQT 0025	T-500 - Process Area Stormwater Tank	37850 gallons		333240 gallons/yr	8760 hr/yr	
EQT 0026	T-544 - Process Area Stormwater Tank	8169 gallons		2.33 MM gallons/yr	8760 hr/yr	
EQT 0027	T-545 - Process Area Stormwater Tank	8169 gallons		333240 gallons/yr	8760 hr/yr	
EQT 0028	T-547 - Stormwater/Treated Process Water Tank	45628 gallons		12.4 MM gallons/yr	8760 hr/yr	
EQT 0029	T-552 - Stormwater/Treated Process Water Tank	2.03 million gallons		12.4 MM gallons/yr	8760 hr/yr	
EQT 0030	T-701 - Caustic Storage Tank	5708 gallons		5.25 MM gallons/yr	8760 hr/yr	
EQT 0031	T-770 - Block 4 Stormwater Tank	1800 gallons		1.33 MM gallons/yr	8760 hr/yr	
EQT 0032	T-772 - Block 3 Stormwater Tank	2594 gallons		1.33 MM gallons/yr	8760 hr/yr	
EQT 0033	T-902 - Stormwater /Treated Process Water Tank	12056 gallons		12.4 MM gallons/yr	8760 hr/yr	
EQT 0034	T-960A - Muriatic Acid Storage Tank	51702 gallons		6.2 MM gallons/yr	8760 hr/yr	
EQT 0035	T-960B - Muriatic Acid Storage Tank	51702 gallons		6.2 MM gallons/yr	8760 hr/yr	
EQT 0036	T-962A - Muriatic Acid Storage Tank	51702 gallons		6.2 MM gallons/yr	8760 hr/yr	
EQT 0037	T-962B - Muriatic Acid Storage Tank	51702 gallons		6.2 MM gallons/yr	8760 hr/yr	
EQT 0038	T-986 - Caustic Storage Tank	7046 gallons		2.84 MM gallons/yr	8760 hr/yr	
EQT 0039	VS-901 - 1-901 A/B Thermal Oxidizers		14800 ft ³ /min	14800 ft ³ /min	8760 hr/yr	
EQT 0040	EPG-1 - Emergency Power Generator	365 kW	300 kW	362 hr/yr	362 hr/yr	
EQT 0041	EPG-2 - Emergency Power Generator	175 kW	175 kW	362 hr/yr	362 hr/yr	
EQT 0042	AIR-1 - Diesel Air Compressor No. 1	440 horsepower			288 hr/yr	
EQT 0043	AIR-2 - Diesel Air Compressor No. 2	440 horsepower			288 hr/yr	
EQT 0044	AIR-3 - Diesel Air Compressor No. 3	285 horsepower			720 hr/yr	
EQT 0045	T-546 - Process Area Stormwater Collection Tank	4775 gallons			8760 hr/yr	
EQT 0046	T-101 - Reactor Crude EDC Tank (constructed after 7/23/1984)	6777 gallons			8760 hr/yr	
EQT 0047	T-102 - Caustic Decanter (constructed after 7/23/1984)	20121 gallons			8760 hr/yr	

INVENTORIES

AJ ID: 4013 - Georgia Gulf Lake Charles LLC - VCM Plant
 Activity Number: PER200B0004
 Permit Number: 0520-00012-V1
 Air - Title V Regular Permit Minor Mod

Subject Item Inventory:

ID	Description	Tank Volume	Max. Operating Rate	Normal Operating Rate	Contents	Operating Time
VCM Plant						
EQT 0048	T-103A - Acid Wash Tank (constructed after 7/23/1984)	12100 gallons				8760 hr/yr
EQT 0049	T-110 - Water/EDC Separator Tank (constructed after 7/23/1984)	8502 gallons				8760 hr/yr
EQT 0050	T-202 - HCl Column Bottom Tank (constructed after 7/23/1984)	9028 gallons				8760 hr/yr
EQT 0051	T-204 - HCl storage Tank (constructed after 7/23/1984)	66082 gallons				8760 hr/yr
EQT 0052	T-401A - VCM Check Sphere (constructed after 7/23/1984)	86302 gallons				8760 hr/yr
EQT 0053	T-401B - VCM Check Sphere (constructed after 7/23/1984)	86302 gallons				8760 hr/yr
EQT 0054	T-401C - VCM Check Sphere (constructed after 7/23/1984)	86302 gallons				8760 hr/yr
EQT 0055	T-402 - Stormwater/Process Water Storage (constructed after 7/23/1984)	60000 gallons				8760 hr/yr
EQT 0056	T-405 - Heavy Ends Storage Tank (constructed after 7/23/1984)	62000 gallons				8760 hr/yr
EQT 0057	T-411A - VCM Storage Sphere (constructed after 7/23/1984)	840000 gallons				8760 hr/yr
EQT 0058	T-411B - VCM Storage Sphere (constructed after 7/23/1984)	840000 gallons				8760 hr/yr
EQT 0059	T-411C - VCM Storage Sphere (constructed after 7/23/1984)	840000 gallons				8760 hr/yr
EQT 0060	T-411D - VCM Storage Sphere (constructed after 7/23/1984)	1.29 million gallons				8760 hr/yr
EQT 0061	T-413 - Groundwater Tank (constructed after 7/23/1984)	1988 gallons				8760 hr/yr
EQT 0062	T-423 - Caustic Storage Tank (constructed after 7/23/1984)	105000 gallons				8760 hr/yr
EQT 0063	T-449 - Carbon Tetrachloride Tank (constructed after 7/23/1984)	5000 gallons				8760 hr/yr
EQT 0064	T-450 - EDC Storage Tank (constructed in 1966)	593750 gallons				8760 hr/yr
EQT 0065	T-451 - EDC Storage Tank (constructed after 7/23/1984)	1 million gallons				8760 hr/yr
EQT 0066	T-452 - Heavy Ends Storage Tank (constructed after 7/23/1984)	115000 gallons				8760 hr/yr
EQT 0067	T-453 - Wet Ethylene Dichloride Storage Tank (constructed in 1989)	615144 gallons				8760 hr/yr
EQT 0068	T-460 - Stormwater Collection/Process Wastewater Storage (constructed in 1989)	38689 gallons				8760 hr/yr
EQT 0069	T-490 - Vinyl Vent Recovery Storage (constructed after 7/23/1984)	9534 gallons				8760 hr/yr
EQT 0070	T-491 - Car Loading Recovery Storage (constructed after 7/23/1984)	1309 gallons				8760 hr/yr
EQT 0071	T-501 - Wet Vent Knock Out (constructed after 7/23/1984)	3536 gallons				8760 hr/yr
EQT 0072	T-506 - Economizer and Knock Out (constructed after 7/23/1984)	720 gallons				8760 hr/yr
EQT 0073	T-512 - Closed Process Sewer Collection (constructed after 7/23/1984)	16320 gallons				8760 hr/yr
EQT 0074	T-514 - Closed Process Sewer Collection (constructed after 7/23/1984)	1500 gallons				8760 hr/yr
EQT 0075	T-550 - Stormwater Collection/Process Wastewater Storage	568000 gallons				8760 hr/yr

INVENTORIES

AI ID: 4013 - Georgia Gulf Lake Charles LLC - VCM Plant
 Activity Number: PER2008004
 Permit Number: 0520-00012-V1
 Air - Title V Regular Permit Minor Mod

Subject Item Inventory:

ID	Description	Tank Volume	Max. Operating Rate	Normal Operating Rate	Contents	Operating Time
VCM Plant						
EQT 0076	(constructed after 7/23/1984) T-551 - Stormwater Collection/Process Wastewater Storage (constructed after 7/23/1984)	339654 gallons				8760 hr/yr
EQT 0077	T-601 - HCl Column Vent Control Storage (constructed after 7/23/1984)	50983 gallons				8760 hr/yr
EQT 0078	T-715 - Stripper Feed Phase Separator Tank (constructed after 7/23/1984)	11011 gallons				8760 hr/yr
EQT 0079	T-715S - T-715/T-103A Spare Tank (constructed after 7/23/1984)	11011 gallons				8760 hr/yr
EQT 0080	T-716 - Stripper Feed Tank (constructed after 7/23/1984)	6769 gallons				8760 hr/yr
EQT 0081	T-716S - T-716/T-745 Spare Tank (constructed after 7/23/1984)	6769 gallons				8760 hr/yr
EQT 0082	T-730 - ASU First Stage Neutralization Tank (constructed after 7/23/1984)	1905 gallons				8760 hr/yr
EQT 0083	T-731 - ASU Second Stage Neutralization Tank (constructed after 7/23/1984)	1905 gallons				8760 hr/yr
EQT 0084	T-745 - Chloral Conversion Phase Separator (constructed after 7/23/1984)	8687 gallons				8760 hr/yr
EQT 0085	T-746 - Chloral Conversion First Stage Neutralization Tank (constructed after 7/23/1984)	714 gallons				8760 hr/yr
EQT 0086	T-747 - Chloral Conversion Second Stage Neutralization Tank (constructed after 7/23/1984)	714 gallons				8760 hr/yr
EQT 0087	T-748 - Chloral Conversion Third Stage Neutralization Tank (constructed after 7/23/1984)	714 gallons				8760 hr/yr
EQT 0088	T-760 - ASU Third Stage Neutralization Tank (constructed after 7/23/1984)	7637 gallons				8760 hr/yr
EQT 0089	T-774 - Block 3/4 CPS Collection Tank	1950 gallons				8760 hr/yr
EQT 0090	T-785 - Chloral Conversion Retention Tank (constructed after 7/23/1984)	23980 gallons				8760 hr/yr
EQT 0091	T-534A - North Acid Neutralization Tank (constructed after 7/23/1984)	31915 gallons				8760 hr/yr
EQT 0092	T-534B - South Acid Neutralization Tank (constructed after 7/23/1984)	31915 gallons				8760 hr/yr
EQT 0093	S-306S - Spare Tank (constructed after 7/23/1984)	3500 gallons				8760 hr/yr
EQT 0094	S-309S - Spare Tank (constructed after 7/23/1984)	992 gallons				8760 hr/yr
EQT 0095	S-316S-A - Spare Tank (constructed after 7/23/1984)	3500 gallons				8760 hr/yr
EQT 0096	S-316S-B - Spare Tank (constructed after 7/23/1984)	3500 gallons				8760 hr/yr
FUG 0001	FE-1 - Process Equipment Fugitives					B760 hr/yr
RLP 0038	VS-534 - Thermal Oxidizer Area Collection Vent Scrubber (for Emergency)				(None Specified)	
RLP 0039	F-412A,B,C,D - Tank Farm Carbon Adsorption System Vent (for Emergency)				(None Specified)	
RLP 0040	LAB-002 - Southwest Vent Stack					8760 hr/yr

INVENTORIES

AI ID: 4013 - Georgia Gulf Lake Charles LLC - VCM Plant
 Activity Number: PER20080004
 Permit Number: 0520-00012-V1
 Air - Title V Regular Permit Minor Mod

Subject Item Inventory:

ID	Description	Tank Volume	Max. Operating Rate	Normal Operating Rate	Contents	Operating Time
VCM Plant						
RLP 0041	LAB-CAP - Laboratory Emissions					8760 hr/yr
RLP 0042	C-102 - Light Ends Column					8760 hr/yr
RLP 0043	C-103 - Heavy Ends Column					8760 hr/yr
RLP 0044	C-104 - EDC Tar Still Column					8760 hr/yr
RLP 0045	C-202 - HCl Column					8760 hr/yr
RLP 0046	C-203 - Vinyl Column					8760 hr/yr
RLP 0047	C-204 - Tar Still Column					8760 hr/yr
RLP 0048	C-717 - Process Water Steam Stripper					8760 hr/yr
RLP 0049	C-717B - Stormwater Stripper					8760 hr/yr
RLP 0050	R-101 - EDC Direct Chlorination Reactor					8760 hr/yr
RLP 0051	R-102 - EDC Recycle Chlorinator					8760 hr/yr
RLP 0052	R-300 - Acetylene Hydrogenator					8760 hr/yr
RLP 0053	R-301/302/303 - Oxychlorination Reactors					8760 hr/yr

Stack Information:

ID	Description	Velocity (ft/sec)	Flow Rate (cubic ft/min-actual)	Diameter (feet)	Discharge Area (square feet)	Height (feet)	Temperature (°F)
VCM Plant							
EQT 0010	CT-50 - Main Plant Cooling Tower		4600000			56	90
EQT 0011	CT-950 - Thermal Oxidizer Cooling Tower					30	90
EQT 0014	R-201A - EDC Cracking Furnace No. 1	42.1	40220	4.5		120	824
EQT 0015	R-201B - EDC Cracking Furnace No. 2	42.1	40220	4.5		120	824
EQT 0016	R-201C - EDC Cracking Furnace No. 3	37.9	40275	4.75		148	370
EQT 0021	S-201A - Decoking Scrubber No. 1	77	3630	1		37.5	212
EQT 0022	S-201B - Decoking Scrubber No. 2	68	3630	1		37.5	212
EQT 0023	S-201C - Decoking Scrubber No. 3	100	4274	1		37.5	212
EQT 0039	VS-901 - I-901 A/B Thermal Oxidizers	35	14800	3		145	125
EQT 0040	EPG-1 - Emergency Power Generator	336	2530	.4		15	780
EQT 0041	EPG-2 - Emergency Power Generator	182	1515	.42		6.5	1055
EQT 0042	AIR-1 - Diesel Air Compressor No. 1	331	2747	.42		8	925
EQT 0043	AIR-2 - Diesel Air Compressor No. 2	331	2747	.42		8	925
EQT 0044	AIR-3 - Diesel Air Compressor No. 3	209	1739	.42		6.5	720
RLP 0039	F-412A, B,C,D - Tank Farm Carbon Adsorption System Vent (for Emergency)			.5		65	

INVENTORIES

AI ID: 4013 - Georgia Gulf Lake Charles LLC - VCM Plant
 Activity Number: PER20080004
 Permit Number: 0520-00012-V1
 Air - Title V Regular Permit Minor Mod

Relationships:

ID	Description	Relationship	ID	Description
EQT 0039	VS-901 - I-901 A/B Thermal Oxidizers	Controls emissions from	EQT 0046	T-101 - Reactor Crude EDC Tank (constructed after 7/23/1984)
EQT 0039	VS-901 - I-901 A/B Thermal Oxidizers	Controls emissions from	EQT 0047	T-102 - Caustic Decanter (constructed after 7/23/1984)
EQT 0039	VS-901 - I-901 A/B Thermal Oxidizers	Controls emissions from	RLP 0053	R-301/302/303 - Oxychlorination Reactors
EQT 0039	VS-901 - I-901 A/B Thermal Oxidizers	Controls emissions from	EQT 0048	T-103A - Acid Wash Tank (constructed after 7/23/1984)
EQT 0039	VS-901 - I-901 A/B Thermal Oxidizers	Controls emissions from	EQT 0049	T-110 - Water/EDC Separator Tank (constructed after 7/23/1984)
EQT 0039	VS-901 - I-901 A/B Thermal Oxidizers	Controls emissions from	EQT 0050	T-202 - HCl Column Bottom Tank (constructed after 7/23/1984)
EQT 0039	VS-901 - I-901 A/B Thermal Oxidizers	Controls emissions from	EQT 0051	T-204 - HCl storage Tank (constructed after 7/23/1984)
EQT 0039	VS-901 - I-901 A/B Thermal Oxidizers	Controls emissions from	EQT 0052	T-401A - VCM Check Sphere (constructed after 7/23/1984)
EQT 0039	VS-901 - I-901 A/B Thermal Oxidizers	Controls emissions from	EQT 0053	T-401B - VCM Check Sphere (constructed after 7/23/1984)
EQT 0039	VS-901 - I-901 A/B Thermal Oxidizers	Controls emissions from	EQT 0054	T-401C - VCM Check Sphere (constructed after 7/23/1984)
EQT 0039	VS-901 - I-901 A/B Thermal Oxidizers	Controls emissions from	EQT 0055	T-402 - Stormwater/Process Water Storage (constructed after 7/23/1984)
EQT 0039	VS-901 - I-901 A/B Thermal Oxidizers	Controls emissions from	EQT 0056	T-405 - Heavy Ends Storage Tank (constructed after 7/23/1984)
EQT 0039	VS-901 - I-901 A/B Thermal Oxidizers	Controls emissions from	EQT 0057	T-411A - VCM Storage Sphere (constructed after 7/23/1984)
EQT 0039	VS-901 - I-901 A/B Thermal Oxidizers	Controls emissions from	EQT 0058	T-411B - VCM Storage Sphere (constructed after 7/23/1984)
EQT 0039	VS-901 - I-901 A/B Thermal Oxidizers	Controls emissions from	EQT 0059	T-411C - VCM Storage Sphere (constructed after 7/23/1984)
EQT 0039	VS-901 - I-901 A/B Thermal Oxidizers	Controls emissions from	EQT 0060	T-411D - VCM Storage Sphere (constructed after 7/23/1984)
EQT 0039	VS-901 - I-901 A/B Thermal Oxidizers	Controls emissions from	EQT 0061	T-413 - Groundwater Tank (constructed after 7/23/1984)
EQT 0039	VS-901 - I-901 A/B Thermal Oxidizers	Controls emissions from	EQT 0062	T-423 - Caustic Storage Tank (constructed after 7/23/1984)
EQT 0039	VS-901 - I-901 A/B Thermal Oxidizers	Controls emissions from	EQT 0063	T-449 - Carbon Tetrachloride Tank (constructed after 7/23/1984)
EQT 0039	VS-901 - I-901 A/B Thermal Oxidizers	Controls emissions from	EQT 0064	T-450 - EDC Storage Tank (constructed in 1966)
EQT 0039	VS-901 - I-901 A/B Thermal Oxidizers	Controls emissions from	EQT 0065	T-451 - EDC Storage Tank (constructed after 7/23/1984)
EQT 0039	VS-901 - I-901 A/B Thermal Oxidizers	Controls emissions from	EQT 0066	T-452 - Heavy Ends Storage Tank (constructed after 7/23/1984)
EQT 0039	VS-901 - I-901 A/B Thermal Oxidizers	Controls emissions from	EQT 0067	T-453 - Wet Ethylene Dichloride Storage Tank (constructed in 1989)
EQT 0039	VS-901 - I-901 A/B Thermal Oxidizers	Controls emissions from	EQT 0068	T-460 - Stormwater Collection/Process Wastewater Storage (constructed in 1989)
EQT 0039	VS-901 - I-901 A/B Thermal Oxidizers	Controls emissions from	EQT 0069	T-490 - Vinyl Vent Recovery Storage (constructed after 7/23/1984)
EQT 0039	VS-901 - I-901 A/B Thermal Oxidizers	Controls emissions from	EQT 0070	T-491 - Car Loading Recovery Storage (constructed after 7/23/1984)
EQT 0039	VS-901 - I-901 A/B Thermal Oxidizers	Controls emissions from	EQT 0071	T-501 - Wet Vent Knock Out (constructed after 7/23/1984)
EQT 0039	VS-901 - I-901 A/B Thermal Oxidizers	Controls emissions from	EQT 0072	T-506 - Economizer and Knock Out (constructed after 7/23/1984)
EQT 0039	VS-901 - I-901 A/B Thermal Oxidizers	Controls emissions from	EQT 0073	T-512 - Closed Process Sewer Collection (constructed after 7/23/1984)
EQT 0039	VS-901 - I-901 A/B Thermal Oxidizers	Controls emissions from	EQT 0074	T-514 - Closed Process Sewer Collection (constructed after 7/23/1984)
EQT 0039	VS-901 - I-901 A/B Thermal Oxidizers	Controls emissions from	EQT 0075	T-550 - Stormwater Collection/Process Wastewater Storage (constructed after 7/23/1984)
EQT 0039	VS-901 - I-901 A/B Thermal Oxidizers	Controls emissions from	EQT 0076	T-551 - Stormwater Collection/Process Wastewater Storage (constructed after 7/23/1984)

INVENTORIES

AI ID: 4013 - Georgia Gulf Lake Charles LLC - VCM Plant
 Activity Number: PER20080004
 Permit Number: 0520-00012-V1
 Air - Title V Regular Permit Minor Mod

Relationships:

ID	Description	Relationship	ID	Description
EOT 0039	VS-901 - I-901 A/B Thermal Oxidizers	Controls emissions from	EOT 0077	T-601 - HCl Column Vent Control Storage (constructed after 7/23/1984)
EOT 0039	VS-901 - I-901 A/B Thermal Oxidizers	Controls emissions from	EOT 0078	T-715 - Stripper Feed Phase Separator Tank (constructed after 7/23/1984)
EOT 0039	VS-901 - I-901 A/B Thermal Oxidizers	Controls emissions from	EOT 0079	T-715/T-103A Spare Tank (constructed after 7/23/1984)
EOT 0039	VS-901 - I-901 A/B Thermal Oxidizers	Controls emissions from	EOT 0080	T-716 - Stripper Feed Tank (constructed after 7/23/1984)
EOT 0039	VS-901 - I-901 A/B Thermal Oxidizers	Controls emissions from	EOT 0081	T-716S - T-716/T-745 Spare Tank (constructed after 7/23/1984)
EOT 0039	VS-901 - I-901 A/B Thermal Oxidizers	Controls emissions from	EOT 0082	T-730 - ASU First Stage Neutralization Tank (constructed after 7/23/1984)
EOT 0039	VS-901 - I-901 A/B Thermal Oxidizers	Controls emissions from	EOT 0083	T-731 - ASU Second Stage Neutralization Tank (constructed after 7/23/1984)
EOT 0039	VS-901 - I-901 A/B Thermal Oxidizers	Controls emissions from	EOT 0084	T-745 - Chloral Conversion Phase Separator (constructed after 7/23/1984)
EOT 0039	VS-901 - I-901 A/B Thermal Oxidizers	Controls emissions from	EOT 0085	T-746 - Chloral Conversion First Stage Neutralization Tank (constructed after 7/23/1984)
EOT 0039	VS-901 - I-901 A/B Thermal Oxidizers	Controls emissions from	EOT 0086	T-747 - Chloral Conversion Second Stage Neutralization Tank (constructed after 7/23/1984)
EOT 0039	VS-901 - I-901 A/B Thermal Oxidizers	Controls emissions from	EOT 0087	T-748 - Chloral Conversion Third Stage Neutralization Tank (constructed after 7/23/1984)
EOT 0039	VS-901 - I-901 A/B Thermal Oxidizers	Controls emissions from	EOT 0088	T-760 - ASU Third Stage Neutralization Tank (constructed after 7/23/1984)
EOT 0039	VS-901 - I-901 A/B Thermal Oxidizers	Controls emissions from	EOT 0089	T-774 - Block 3/A CPS Collection Tank
EOT 0039	VS-901 - I-901 A/B Thermal Oxidizers	Controls emissions from	EOT 0090	T-785 - Chloral Conversion Retention Tank (constructed after 7/23/1984)
EOT 0039	VS-901 - I-901 A/B Thermal Oxidizers	Controls emissions from	RLP 0042	C-102 - Light Ends Column
EOT 0039	VS-901 - I-901 A/B Thermal Oxidizers	Controls emissions from	RLP 0043	C-103 - Heavy Ends Column
EOT 0039	VS-901 - I-901 A/B Thermal Oxidizers	Controls emissions from	RLP 0044	C-104 - EDC Tar Still Column
EOT 0039	VS-901 - I-901 A/B Thermal Oxidizers	Controls emissions from	RLP 0045	C-202 - HCl Column
EOT 0039	VS-901 - I-901 A/B Thermal Oxidizers	Controls emissions from	RLP 0046	C-203 - Vinyl Column
EOT 0039	VS-901 - I-901 A/B Thermal Oxidizers	Controls emissions from	RLP 0047	C-204 - Tar Still Column
EOT 0039	VS-901 - I-901 A/B Thermal Oxidizers	Controls emissions from	RLP 0048	C-717 - Process Water Steam Stripper
EOT 0039	VS-901 - I-901 A/B Thermal Oxidizers	Controls emissions from	RLP 0049	C-717B - Stormwater Stripper
EOT 0039	VS-901 - I-901 A/B Thermal Oxidizers	Controls emissions from	RLP 0050	R-101 - EDC Direct Chlorination Reactor
EOT 0039	VS-901 - I-901 A/B Thermal Oxidizers	Controls emissions from	RLP 0051	R-102 - EDC Recycle Chlorinator
EOT 0039	VS-901 - I-901 A/B Thermal Oxidizers	Controls emissions from	RLP 0052	R-300 - Acetylene Hydrogenator
RLP 0038	VS-534 - Thermal Oxidizer Area Collection Vent Scrubber (for Emergency)	Controls emissions from	EOT 0091	T-534A - North Acid Neutralization Tank (constructed after 7/23/1984)
RLP 0038	VS-534 - Thermal Oxidizer Area Collection Vent Scrubber (for Emergency)	Controls emissions from	EOT 0092	T-534B - South Acid Neutralization Tank (constructed after 7/23/1984)

INVENTORIES

AI ID: 4013 - Georgia Gulf Lake Charles LLC - VCM Plant
 Activity Number: PER20080004
 Permit Number: 0520-00012-V1
 Air - Title V Regular Permit Minor Mod

Subject Item Groups:

ID	Group Type	Group Description
CRG 0001	Common Requirements Group	- Distillation Columns
CRG 0002	Common Requirements Group	- Storage/Spare Tanks (Group 1)
CRG 0003	Common Requirements Group	- Reactors
CRG 0004	Common Requirements Group	- Storage Tanks (Group 1)
CRG 0005	Common Requirements Group	- Storage Tanks (Group 2)
GRP 0004	Equipment Group	R-201 CAP - EDC Cracking Furnace Emission Cap
GRP 0005	Equipment Group	S-201 CAP - Decoking Scrubber Emission Cap
UNF 0001	Unit or Facility Wide	- VCM Plant

Group Membership:

ID	Description	Member of Groups
EGT 0014	R-201A - EDC Cracking Furnace No. 1	GRP00000000004
EGT 0015	R-201B - EDC Cracking Furnace No. 2	GRP00000000004
EGT 0016	R-201C - EDC Cracking Furnace No. 3	GRP00000000004
EGT 0021	S-201A - Decoking Scrubber No. 1	GRP00000000005
EGT 0022	S-201B - Decoking Scrubber No. 2	GRP00000000005
EGT 0023	S-201C - Decoking Scrubber No. 3	GRP00000000005
EGT 0049	T-110 - Water/EDC Separator Tank (constructed after 7/23/1984)	CRG00000000002
EGT 0055	T-402 - Stormwater/Process Water Storage (constructed after 7/23/1984)	CRG00000000004
EGT 0056	T-405 - Heavy Ends Storage Tank (constructed after 7/23/1984)	CRG00000000004
EGT 0061	T-413 - Groundwater Tank (constructed after 7/23/1984)	CRG00000000004
EGT 0062	T-423 - Caustic Storage Tank (constructed after 7/23/1984)	CRG00000000004
EGT 0063	T-449 - Carbon Tetrachloride Tank (constructed after 7/23/1984)	CRG00000000002
EGT 0064	T-450 - EDC Storage Tank (constructed in 1966)	CRG00000000004
EGT 0065	T-451 - EDC Storage Tank (constructed after 7/23/1984)	CRG00000000004
EGT 0066	T-452 - Heavy Ends Storage Tank (constructed after 7/23/1984)	CRG00000000004
EGT 0067	T-453 - Wei Ethylene Dichloride Storage Tank (constructed in 1989)	CRG00000000004
EGT 0068	T-480 - Stormwater Collection/Process Wastewater Storage (constructed in 1989)	CRG00000000004
EGT 0071	T-501 - Wei Vent Knock Out (constructed after 7/23/1984)	CRG00000000002
EGT 0073	T-512 - Closed Process Sewer Collection (constructed after 7/23/1984)	CRG00000000005
EGT 0074	T-514 - Closed Process Sewer Collection (constructed after 7/23/1984)	CRG00000000002
EGT 0075	T-550 - Stormwater Collection/Process Wastewater Storage (constructed after 7/23/1984)	CRG00000000004
EGT 0076	T-551 - Stormwater Collection/Process Wastewater Storage (constructed after 7/23/1984)	CRG00000000004
EGT 0077	T-601 - HCl Column Vent Control Storage (constructed after 7/23/1984)	CRG00000000005
EGT 0078	T-715 - Stripper Feed Phase Separator Tank (constructed after 7/23/1984)	CRG00000000005
EGT 0080	T-716 - Stripper Feed Tank (constructed after 7/23/1984)	CRG00000000002
EGT 0081	T-716S - T-716/T-745 Spare Tank (constructed after 7/23/1984)	CRG00000000002
EGT 0082	T-730 - ASU First Stage Neutralization Tank (constructed after 7/23/1984)	CRG00000000002
EGT 0083	T-731 - ASU Second Stage Neutralization Tank (constructed after 7/23/1984)	CRG00000000002

INVENTORIES

AI ID: 4013 - Georgia Gulf Lake Charles LLC - VCM Plant
 Activity Number: PER20080004
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Group Membership:

ID	Description	Member of Groups
EQT 0084	T-745 - Chloral Conversion Phase Separator (constructed after 7/23/1984)	CRG0000000002
EQT 0085	T-746 - Chloral Conversion First Stage Neutralization Tank (constructed after 7/23/1984)	CRG0000000002
EQT 0086	T-747 - Chloral Conversion Second Stage Neutralization Tank (constructed after 7/23/1984)	CRG0000000002
EQT 0087	T-748 - Chloral Conversion Third Stage Neutralization Tank (constructed after 7/23/1984)	CRG0000000002
EQT 0088	T-760 - ASU Third Stage Neutralization Tank (constructed after 7/23/1984)	CRG0000000002
EQT 0090	T-785 - Chloral Conversion Retention Tank (constructed after 7/23/1984)	CRG0000000004
EQT 0093	S-306S - Spare Tank (constructed after 7/23/1984)	CRG0000000002
EQT 0094	S-309S - Spare Tank (constructed after 7/23/1984)	CRG0000000002
EQT 0095	S-316S-A - Spare Tank (constructed after 7/23/1984)	CRG0000000002
EQT 0096	S-316S-B - Spare Tank (constructed after 7/23/1984)	CRG0000000002
RLP 0042	C-102 - Light Ends Column	CRG0000000001
RLP 0043	C-103 - Heavy Ends Column	CRG0000000001
RLP 0044	C-104 - EDC Tar Still Column	CRG0000000001
RLP 0045	C-202 - HCl Column	CRG0000000001
RLP 0046	C-203 - Vinyl Column	CRG0000000001
RLP 0047	C-204 - Tar Still Column	CRG0000000001
RLP 0050	R-101 - EDC Direct Chlorination Reactor	CRG0000000003
RLP 0051	R-102 - EDC Recycle Chlorinator	CRG0000000003
RLP 0052	R-300 - Acetylene Hydrogenator	CRG0000000003

NOTE: The UNF group relationship is not printed in this table. Every subject item is a member of the UNF group

Annual Maintenance Fee:

Fee Number	Air Contaminant Source	Multiplier	Units Of Measure
0620	0620 Halogenated Hydrocarbons (Rated Capacity)	1130.5	MM lbs/yr

SIC Codes:

EMISSION RATES FOR CRITERIA POLLUTANTS

AI ID: 4013 - Georgia Gulf Lake Charles LLC - VCM Plant

Activity Number: PER20080004

Permit Number: 0520-00012-V1

Air - Title V Regular Permit Minor Mod

Subject Item	CO			NOx			PM10			SO2			VOC		
	Avg lb/hr	Max lb/hr	Tons/Year												
VCM Plant															
EQT 0010 CT-50							0.60	0.90	2.62				3.92	39.08	17.16
EQT 0011 CT-950							0.06	0.08	0.25				0.32	3.17	1.39
EQT 0014 R-201A	6.10			8.00				1.20		0.04				0.40	
EQT 0015 R-201B	6.10			8.00				1.20		0.04				0.40	
EQT 0016 R-201C	6.90			9.10				1.30		0.05				0.45	
EQT 0020 T-82													0.03	4.90	0.10
EQT 0021 S-201A	241.40						0.48								
EQT 0022 S-201B	241.40						0.48								
EQT 0023 S-201C	468.90						0.93								
EQT 0024 T-421													0.02	0.08	0.10
EQT 0025 T-500													0.02	0.29	0.10
EQT 0026 T-544													0.08	3.72	0.37
EQT 0027 T-545													0.08	3.72	0.37
EQT 0028 T-547													0.04	1.54	0.15
EQT 0029 T-552													0.01	37.20	0.04
EQT 0030 T-701													0.01	1.10	0.03
EQT 0031 T-902													0.04	0.58	0.20
EQT 0032 T-772													0.02	0.22	0.10
EQT 0033 T-770													0.01	0.16	0.05
EQT 0038 T-985													0.01	0.05	0.03
EQT 0039 VS-901	0.19	0.40	0.80	4.50	5.50	19.70	0.09	0.16	0.40	0.80	1.80	1.03	1.20	4.50	
EQT 0040 EPG-1	0.21	0.21	0.04	6.04	6.04	1.09	0.02	<0.01	2.51	0.45	0.45	0.04	0.04	0.01	
EQT 0041 EPG-2	0.19	0.19	0.03	3.24	3.24	0.59	0.07	0.07	0.01	0.48	0.48	0.09	0.15	0.15	0.03

EMISSION RATES FOR CRITERIA POLLUTANTS

AI ID: 4013 - Georgia Gulf Lake Charles LLC - VCM Plant

Activity Number: PER20080004

Permit Number: 0520-00012-V1

Air - Title V Regular Permit Minor Mod

Subject Item	CO			NOx			PM10			SO2			VOC		
	Avg lb/hr	Max lb/hr	Tons/Year												
VCM Plant															
EQT 0042 AIR-1	1.59	1.59	0.23	2.60	2.60	0.37	0.07	0.07	0.01	0.90	0.90	0.13	0.29	0.29	0.04
EQT 0043 AIR-2	1.59	1.59	0.23	2.60	2.60	0.37	0.07	0.07	0.01	0.90	0.90	0.13	0.29	0.29	0.04
EQT 0044 AIR-3	0.96	0.96	0.34	3.40	3.40	1.22	0.12	0.12	0.04	0.54	0.54	0.20	0.13	0.13	0.05
EQT 0045 T-346													0.03	1.61	0.15
FUG 0001 FE-1														5.87	25.71
GRP 0004 R-201 CAP	15.20	66.58	19.90		87.16	2.90		12.70	0.11		0.48	1.00			4.38
GRP 0005 S-201 CAP	468.90	67.50				0.62		0.09							
RLP 0039 F-412A,B,C,D											<0.01	0.24	<0.01		
RLP 0040 LAB-002											<0.01	0.05	0.01		
RLP 0041 LAB-CAP	<0.01	<0.01	<0.01								0.01	0.24	0.04		

Note: Emission rates in bold are from alternate scenarios and are not included in permitted totals unless otherwise noted in a footnote.

EMISSION RATES FOR TAP/HAP & OTHER POLLUTANTS

AI ID: 4013 - Georgia Gulf Lake Charles LLC - VCM Plant
 Activity Number: PER20080004
 Permit Number: 0520-00012-V1
 Air - Title V Regular Permit Minor Mod

Emission Pt.	Pollutant	Avg lb/hr	Max lb/hr	Tons/Year
EQT 0010 CT-50	1,1,2-Trichloroethane	<0.001	0.002	0.001
	1,1-Dichloroethane	0.001	0.01	0.003
	1,2-Dichloroethane	1.11	11.11	4.87
	Benzene	0.01	0.07	0.03
	Carbon tetrachloride	0.004	0.04	0.02
	Chlorine	2.20	3.30	9.64
	Chloroethane	<0.001	0.001	0.001
	Chloroform	1.48	14.81	6.49
	Chloroprene	0.004	0.04	0.02
	Trichloroethylene	0.005	0.05	0.02
EQT 0011 CT-850	Vinyl chloride	0.19	1.85	0.81
	Vinyldene chloride	<0.001	0.001	<0.001
	1,1,2-Trichloroethane	<0.001	<0.001	<0.001
	1,1-Dichloroethane	<0.001	0.001	<0.001
	1,2-Dichloroethane	0.11	1.05	0.46
	Benzene	0.001	0.01	0.003
	Carbon tetrachloride	<0.001	0.003	0.002
	Chlorine	2.20	3.30	9.64
	Chloroethane	<0.001	<0.001	<0.001
	Chloroform	0.14	1.40	0.61
EQT 0013 L-962	Chloroprene	<0.001	0.003	0.002
	Trichloroethylene	<0.001	0.005	0.002
EQT 0014 R-201A	Vinyl chloride	0.02	0.18	0.08
	Vinyldene chloride	<0.001	<0.001	<0.001
	Hydrochloric acid	0.10	7.90	0.03
	2-Methylnaphthalene		<0.001	
	Arsenic (and compounds)		<0.001	
	Barium (and compounds)		<0.001	
	Benzene		<0.001	
	Beryllium (Table 51.1)		<0.001	
	Cadmium (and compounds)		<0.001	
	Chromium VI (and compounds)		<0.001	
	Cobalt compounds		<0.001	

EMISSION RATES FOR TAP/HAP & OTHER POLLUTANTS

AI ID: 4013 - Georgia Gulf Lake Charles LLC - VCM Plant

Activity Number: PER20080004

Permit Number: 0520-00012-V1

Air - Title V Regular Permit Minor Mod

Emission Pt.	Pollutant	Avg lb/hr	Max lb/hr	Tons/Year
EQT 0014 R-201A	Copper (and compounds)		<0.001	
	Dichlorobenzene		<0.001	
	Formaldehyde		0.01	
	Lead compounds		<0.001	
	Manganese (and compounds)		<0.001	
	Mercury (and compounds)		<0.001	
	Naphthalene		<0.001	
	Nickel (and compounds)		<0.001	
	Polynuclear Aromatic Hydrocarbons		<0.001	
	Selenium (and compounds)		<0.001	
	Toluene		<0.001	
	Zinc (and compounds)		<0.001	
EQT 0015 R-201B	n-Hexane		0.13	
	2-Methylnaphthalene		<0.001	
	Arsenic (and compounds)		<0.001	
	Barium (and compounds)		<0.001	
	Benzene		<0.001	
	Beryllium (Table 51.1)		<0.001	
	Cadmium (and compounds)		<0.001	
	Chromium VI (and compounds)		<0.001	
	Cobalt compounds		<0.001	
	Copper (and compounds)		<0.001	
	Dichlorobenzene		<0.001	
	Formaldehyde		0.01	
	Lead compounds		<0.001	
	Manganese (and compounds)		<0.001	
	Mercury (and compounds)		<0.001	
	Naphthalene		<0.001	
	Nickel (and compounds)		<0.001	
	Polynuclear Aromatic Hydrocarbons		<0.001	
	Selenium (and compounds)		<0.001	
	Toluene		<0.001	
	Zinc (and compounds)		<0.001	

EMISSION RATES FOR TAP/HAP & OTHER POLLUTANTS

AI ID: 4013 - Georgia Gulf Lake Charles LLC - VCM Plant

Activity Number: PER20080004

Permit Number: 0520-00012-V1

Air - Title V Regular Permit Minor Mod

Emission Pt.	Pollutant	Avg lb/hr	Max lb/hr	Tons/Year
EQT 0015 R-201B	n-Hexane	.	0.13	
EQT 0016 R-201C	2-Methylnaphthalene	.	<0.001	
	Arsenic (and compounds)	.	<0.001	
	Barium (and compounds)	.	<0.001	
	Benzene	.	<0.001	
	Beryllium (Table 51.1)	.	<0.001	
	Cadmium (and compounds)	.	<0.001	
	Chromium VI (and compounds)	.	<0.001	
	Cobalt compounds	.	<0.001	
	Copper (and compounds)	.	<0.001	
	Dichlorobenzene	.	<0.001	
	Formaldehyde	.	0.01	
	Lead compounds	.	<0.001	
	Manganese (and compounds)	.	<0.001	
	Mercury (and compounds)	.	<0.001	
	Naphthalene	.	<0.001	
	Nickel (and compounds)	.	<0.001	
	Polynuclear Aromatic Hydrocarbons	.	<0.001	
	Selenium (and compounds)	.	<0.001	
	Toluene	.	<0.001	
	Zinc (and compounds)	.	<0.001	
	n-Hexane	.	0.15	
EQT 0018 T-70	Sulfuric acid	<0.01	0.02	<0.01
EQT 0019 T-75	Sulfuric acid	<0.01	0.08	<0.01
EQT 0020 T-82	2,2,4-Trimethylpentane	<0.001	0.04	0.001
	Benzene	<0.001	0.04	0.001
	Ethyl benzene	<0.001	0.005	<0.001
	Toluene	<0.001	0.06	0.002
	Xylene (mixed isomers)	<0.001	0.02	0.001
	n-Hexane	<0.001	0.08	0.002
EQT 0024 T-421	Vinyl chloride	0.02	0.08	0.10
EQT 0025 T-500	1,2-Dichloroethane	0.02	0.27	0.09
	Carbon tetrachloride	<0.001	0.001	0.001

EMISSION RATES FOR TAP/HAP & OTHER POLLUTANTS

AI ID: 4013 - Georgia Gulf Lake Charles LLC - VCM Plant

Activity Number: PER20080004

Permit Number: 0520-00012-V1

Air - Title V Regular Permit Minor Mod

Emission Pt.	Pollutant	Avg lb/hr	Max lb/hr	Tons/Year
EQT 0025 T-500	Chloroform	0.002	0.02	0.01
	Vinyl chloride	<0.001	0.001	0.001
EQT 0026 T-544	1,2-Dichloroethane	0.07	3.10	0.31
	Carbon tetrachloride	0.001	0.03	0.003
	Chloroform	0.01	0.56	0.05
	Vinyl chloride	0.001	0.03	0.004
EQT 0027 T-545	1,2-Dichloroethane	0.07	3.10	0.31
	Carbon tetrachloride	0.001	0.03	0.003
	Chloroform	0.01	0.56	0.05
	Vinyl chloride	0.001	0.03	0.004
EQT 0028 T-547	1,2-Dichloroethane	0.03	1.52	0.13
	Carbon tetrachloride	0.001	0.002	0.002
	Chloroform	0.002	0.02	0.01
	Vinyl chloride	0.001	0.002	0.002
EQT 0029 T-552	1,2-Dichloroethane	<0.01	11.60	0.01
	Carbon tetrachloride	<0.01	1.90	<0.01
	Chloroform	<0.01	13.30	0.01
	Vinyl chloride	<0.01	3.70	<0.01
EQT 0030 T-701	Benzene	0.003	0.61	0.01
	Ethyl benzene	<0.001	0.09	0.001
	Naphthalene	0.001	0.003	0.004
	Polynuclear Aromatic Hydrocarbons	<0.001	<0.001	<0.001
	Styrene	<0.001	0.04	0.001
	Toluene	0.003	0.23	0.01
	Xylene (mixed isomers)	<0.001	0.08	0.002
EQT 0031 T-770	n-butyl alcohol	<0.001	0.04	<0.001
	1,2-Dichloroethane	0.01	0.15	0.04
	Carbon tetrachloride	<0.001	<0.001	0.001
	Chloroform	0.001	0.01	0.004
EQT 0032 T-772	Vinyl chloride	<0.001	<0.001	0.001
	1,2-Dichloroethane	0.01	0.21	0.04
	Carbon tetrachloride	<0.001	0.001	0.001
	Chloroform	0.002	0.01	0.01

EMISSION RATES FOR TAP/HAP & OTHER POLLUTANTS

AI ID: 4013 - Georgia Gulf Lake Charles LLC - VCM Plant

Activity Number: PER20080004

Permit Number: 0520-00012-V1

Air - Title V Regular Permit Minor Mod

Emission Pt.	Pollutant	Avg lb/hr	Max lb/hr	Tons/Year
EQT 0032 T-772	Vinyl chloride	<0.001	0.001	0.001
EQT 0033 T-902	1,2-Dichloroethane	0.01	0.55	0.04
	Carbon tetrachloride	0.01	0.01	0.04
	Chloroform	0.01	0.01	0.04
	Vinyl chloride	0.003	0.003	0.01
EQT 0034 T-960A	Hydrochloric acid	<0.01	0.48	0.01
EQT 0035 T-960B	Hydrochloric acid	<0.01	0.48	0.01
EQT 0036 T-962A	Hydrochloric acid	<0.01	0.48	0.01
EQT 0037 T-962B	Hydrochloric acid	<0.01	0.48	0.01
EQT 0038 T-986	Vinyl chloride	0.01	0.05	0.03
EQT 0039 VS-001	1,1,1-Trichloroethane	0.001	0.001	0.004
	1,1,2,2-Tetrachloroethane	0.001	0.001	0.004
	1,1,2-Trichloroethane	0.001	0.001	0.004
	1,1-Dichloroethane	0.001	0.001	0.004
	1,2-Dichloroethane	0.11	0.13	0.48
	1,2-Dichloropropane	0.001	0.001	0.004
	1,3-Butadiene	0.001	0.002	0.004
	1,3-Dichloropropene	<0.01	<0.01	0.01
	1,4-Dichlorobenzene	0.001	0.001	0.004
	Benzene	0.001	0.001	0.004
	Carbon tetrachloride	0.21	0.25	0.92
	Chlorinated Dibenzo-P-Dioxins	1E-7	2E-7	4E-7
	Chlorinated dibenzofurans	1E-7	2E-7	4E-7
	Chlorine	2.00	2.50	8.76
	Chlorobenzene	0.001	0.001	0.004
	Chloroethane	0.11	0.13	0.50
	Chloroform	0.21	0.25	0.90
	Chloroprene	0.004	0.008	0.02
	Ethylene oxide	0.003	0.003	0.013
	Hexachlorobutadiene	0.001	0.001	0.004
	Hydrochloric acid	1.90	3.10	8.30
	Methyl chloride	0.11	0.13	0.50
	Tetrachloroethylene	0.001	0.001	0.004

EMISSION RATES FOR TAP/HAP & OTHER POLLUTANTS

AI ID: 4013 - Georgia Gulf Lake Charles LLC - VCM Plant

Activity Number: PER20080004

Permit Number: 0520-00012-V1

Air - Title V Regular Permit Minor Mod

Emission Pt.	Pollutant	Avg lb/hr	Max lb/hr	Tons/Year
EQT 0039 VS-901	Trichloroethylene	0.001	0.001	0.004
	Vinyl chloride	0.23	0.25	1.00
	Vinylidene chloride	0.001	0.002	0.004
EQT 0040 EPG-1	Benzene	0.003	0.003	<0.001
	Formaldehyde	0.004	0.004	<0.001
EQT 0042 AIR-1	Formaldehyde	0.004	0.004	<0.001
EQT 0043 AIR-2	Formaldehyde	0.004	0.004	<0.001
EQT 0044 AIR-3	Acetaldehyde	0.001	0.001	<0.001
	Benzene	0.002	0.002	<0.001
	Formaldehyde	0.002	0.002	0.001
EQT 0045 T-548	1,2-Dichloroethane	0.03	1.50	0.14
	Carbon tetrachloride	<0.001	0.01	0.001
	Chloroform	0.001	0.09	0.005
	Vinyl chloride	<0.001	0.01	0.002
FUG 0001 FE-1	1,1,1-Trichloroethane	<0.001		0.001
	1,1,2,2-Tetrachloroethane	0.004		0.02
	1,1,2-Trichloroethane	0.06		0.25
	1,1-Dichloroethane	0.01		0.05
	1,2-Dichloroethane	1.57		6.88
	1,2-Dichloropropane	<0.001		0.001
	1,3-Butadiene	0.01		0.02
	1,3-Dichloropropene	<0.001		0.001
	2,2'-dichlorodiethyl ether	0.004		0.02
	Acetaldehyde	<0.001		0.001
	Benzene	<0.001		0.002
	Carbon tetrachloride	0.01		0.04
	Chlorinated Dibenzo-P-Dioxins	1E-7		4E-7
	Chlorinated dibenzofurans	1E-7		4E-7
	Chlorine	0.20		0.88
	Chlorobenzene	0.004		0.02
	Chloroethane	0.04		0.18
	Chloroform	0.01		0.06
	Chloroprene	0.001		0.01

EMISSION RATES FOR TAP/HAP & OTHER POLLUTANTS

AI ID: 4013 - Georgia Gulf Lake Charles LLC - VCM Plant

Activity Number: PER20080004

Permit Number: 0520-00012-V1

Air - Title V Regular Permit Minor Mod

Emission Pt.	Pollutant	Avg lb/hr	Max lb/hr	Tons/Year
FUG 0001 FE-1	Dichloromethane	<0.01		<0.01
	Ethyl benzene	<0.001		0.001
	Ethylene glycol	0.01		0.03
	Ethylene oxide	0.001		0.01
	Hydrochloric acid	0.50		2.19
	Naphthalene	<0.001		<0.001
	Styrene	<0.001		0.001
	Sulfuric acid	0.001		0.003
	Tetrachloroethylene	0.001		0.01
	Toluene	0.001		0.003
	Trichloroethylene	0.05		0.24
	Vinyl chloride	1.25		5.48
GRP 0004 R-201 CAP	Vinyldene chloride	0.001		0.003
	Xylene (mixed isomers)	<0.001		0.001
	2-Methylnaphthalene	<0.001		<0.001
	Arsenic (and compounds)	<0.001		<0.001
	Barium (and compounds)	0.001		0.004
	Benzene	<0.001		0.002
	Beryllium (Table 51.1)	<0.001		<0.001
	Cadmium (and compounds)	<0.001		<0.001
	Chromium VI (and compounds)	<0.001		0.001
	Cobalt compounds	<0.001		0.001
	Copper (and compounds)	<0.001		0.001
	Dichlorobenzene	<0.001		0.001
	Formaldehyde	0.01		0.04
	Lead compounds	<0.001		<0.001
	Manganese (and compounds)	<0.001		<0.001
	Mercury (and compounds)	<0.001		<0.001
	Naphthalene	<0.001		<0.001
	Nickel (and compounds)	<0.001		0.002
	Polynuclear Aromatic Hydrocarbons	<0.001		<0.001
	Selenium (and compounds)	<0.001		<0.001
	Toluene	0.001		0.004

EMISSION RATES FOR TAP/HAP & OTHER POLLUTANTS

AI ID: 4013 - Georgia Gulf Lake Charles LLC - VCM Plant

Activity Number: PER20080004

Permit Number: 0520-00012-V1

Air - Title V Regular Permit Minor Mod

Emission Pt.	Pollutant	Avg lb/hr	Max lb/hr	Tons/Year
GRP 0004 R-201 CAP	Zinc (and compounds)	0.01		0.04
	n-Hexane	0.33		1.45
RLP 0039 F-412A,B,C,D	1,2-Dichloroethane	<0.001	0.24	0.002
RLP 0040 LAB-002	1,2-Dichloroethane	<0.001	<0.001	<0.001
	1,3-Butadiene	<0.001	<0.001	<0.001
	Chloroethane	<0.001	<0.001	<0.001
	Methyl chloride	<0.001	<0.001	<0.001
	Vinyl chloride	0.002	0.05	0.01
RLP 0041 LAB-CAP	1,1,2-Trichloroethane	<0.001	0.01	0.002
	1,2-Dichloroethane	<0.001	<0.001	<0.001
	1,3-Butadiene	<0.001	<0.001	<0.001
	Benzene	<0.001	<0.001	<0.001
	Carbon tetrachloride	<0.001	0.001	<0.001
	Chloroethane	<0.001	<0.001	<0.001
	Chloroform	<0.001	0.01	0.001
	Dichlorobromomethane	<0.001	<0.001	<0.001
	Methanol	0.002	0.05	0.01
	Methyl chloride	<0.001	<0.001	<0.001
	Sulfuric acid	<0.001	<0.001	<0.001
	Toluene	<0.001	<0.001	<0.001
	Trichloroethylene	<0.001	<0.001	<0.001
	Vinyl chloride	0.002	0.05	0.01
UNF 0001	1,1,1-Trichloroethane			0.01
	1,1,2,2-Tetrachloroethane			<0.01
	1,1,2-Trichloroethane			0.25
	1,1-Dichloroethane			0.05
	1,2-Dichloroethane			13.80
	1,2-Dichloropropane			<0.01
	1,3-Butadiene			0.024
	1,3-Dichloropropene			0.01
	1,4-Dichlorobenzene			<0.01
	2,2-dichlorodiethylether			0.02
	2,2,4-Trimethylpentane			<0.01

EMISSION RATES FOR TAP/HAP & OTHER POLLUTANTS

AI ID: 4013 - Georgia Gulf Lake Charles LLC - VCM Plant
 Activity Number: PER20080004
 Permit Number: 0520-00012-V1
 Air - Title V Regular Permit Minor Mod

Emission Pt.	Pollutant	Avg lb/hr	Max lb/hr	Tons/Year
UNF 0001	2-Methylnaphthalene			<0.01
	Acetaldehyde			<0.01
	Arsenic (and compounds)			<0.001
	Benzene			0.04
	Beryllium (Table 51.1)			<0.001
	Cadmium (and compounds)			<0.001
	Carbon tetrachloride			1.02
	Chlorinated Dibenzo-P-Dioxins			8E-7
	Chlorinated dibenzofurans			8E-7
	Chlorine			28.92
	Chlorobenzene			0.024
	Chloroethane			0.68
	Chloroform			8.25
	Chloroprene			0.05
	Chromium VI (and compounds)			<0.001
	Cobalt compounds			<0.001
	Copper (and compounds)			<0.001
	Dichlorobenzene			0.001
	Dichlorobromomethane			<0.01
	Ethyl benzene			<0.01
	Ethylene glycol			0.03
	Ethylene oxide			0.02
	Formaldehyde			0.04
	Hexachlorobutadiene			0.004
	Hydrochloric acid			10.56
	Lead compounds			<0.001
	Manganese (and compounds)			<0.01
	Mercury (and compounds)			<0.001
	Methanol			0.01
	Methyl chloride			0.50
	Naphthalene			<0.01
	Nickel (and compounds)			0.002
	Polynuclear Aromatic Hydrocarbons			<0.001

EMISSION RATES FOR TAP/HAP & OTHER POLLUTANTS

AI ID: 4013 - Georgia Gulf Lake Charles LLC - VCM Plant

Activity Number: PER20080004

Permit Number: 0520-00012-V1

Air - Title V Regular Permit Minor Mod

Emission Pt.	Pollutant	Avg lb/hr	Max lb/hr	Tons/Year
UNF 0001	Selenium (and compounds)			<0.001
	Styrene			<0.01
	Sulfuric acid			<0.01
	Tetrachloroethylene			0.01
	Toluene			0.02
	Trichloroethylene			0.26
	Vinyl chloride			7.53
	Vinyldene chloride			0.01
	Xylene (mixed isomers)			<0.01
	Zinc (and compounds)			0.04
	n-Hexane			1.45
	n-butyl alcohol			<0.01

Note: Emission rates in bold are from alternate scenarios and are not included in permitted totals unless otherwise noted in a footnote. Emission rates attributed to the UNF reflect the sum of the TAP/HAP limits of the individual emission points (or caps) under this permit, but do not constitute an emission cap.

SPECIFIC REQUIREMENTS

AI ID: 4013 - Georgia Gulf Lake Charles LLC - VCM Plant
Activity Number: PER20080004
Permit Number: 0520-00012-V1
Air - Title V Regular Permit Minor Mod

CRG 0001 - Distillation Columns

Group Member: RLP 0042 RLP 0043 RLP 0044 RLP 0045 RLP 0046 RLP 0047

- 1 [40 CFR 60.660] NSPS Subpart NNN is superseded by HON Subpart G for Group 1 process vents per 40 CFR 63.110(d)(4).
40 CFR 61 Subpart F is superseded by HON Subpart G for Group 1 process vents per 40 CFR 63.110(f)(1).
Organic HAP >= 98 % reduction by weight, or <= 20 ppmv, whichever is less stringent, as determined using the methods in 40 CFR 63.116(c).
Subpart G. [40 CFR 63.113(a)(2)]
 - 2 [40 CFR 61.63]
 - 3 [40 CFR 63.113(a)(2)]
 - 4 [40 CFR 63.113(c)(1)(ii)]
 - 5 [40 CFR 63.113(c)(1)]
 - 6 [40 CFR 63.117(a)]
 - 7 [40 CFR 63.113(a)(2)]
 - 8 [LAC 33:III.2103.E.1]
 - 9 [LAC 33:III.2103.H.3]
 - 10 [LAC 33:III.2103.I.]
- Which Months: All Year Statistical Basis: None specified
- Halogenated vent streams: Hydrogen halides and halogens >= 95 % reduction, or reduce the outlet mass of total hydrogen halides and halogens < 0.45 kg/hr, whichever is less stringent, using a halogen reduction device. Subpart G. [40 CFR 63.113(c)(1)(ii)]
- Which Months: All Year Statistical Basis: None specified
- Halogenated vent streams: Convey vent stream exiting a combustion device to a halogen reduction device, such as a scrubber, before being discharged to the atmosphere. Subpart G. [40 CFR 63.113(c)(1)]
- Equipment/operational data recordkeeping by electronic or hard copy at the regulation's specified frequency. Keep up-to-date, readily accessible records of the data specified in 40 CFR 63.117(a)(4) through (a)(8), as applicable. Subpart G. [40 CFR 63.117(a)]

CRG 0002 - Storage/Spare Tanks (Group 1)

Group Member: EQT 0049 EQT 0063 EQT 0071 EQT 0074 EQT 0080 EQT 0081 EQT 0082 EQT 0083 EQT 0084 EQT 0085 EQT 0086 EQT 0087 EQT 0088 EQT 0093 EQT 0094 EQT 0095 EQT 0096

- Equip with a vapor loss control system, consisting of a gathering system capable of collecting volatile organic compound vapors and a vapor disposal system capable of processing such organic vapors. All tank gauging and sampling devices shall be gas-tight except when gauging or sampling is taking place.
- VOC, Total >= 95 % control efficiency using a vapor loss control system. This limitation does not apply during periods of planned routine maintenance which may not exceed 240 hours per year.
Which Months: All Year Statistical Basis: None specified
- Determine VOC maximum true vapor pressure using the methods in LAC 33:III.2103.H.3.a-e.
- Equipment/operational data recordkeeping by electronic or hard copy at the regulation's specified frequency. Keep records of the information specified in LAC 33:III.2103.I.1 - 7, as applicable.

CRG 0003 - Reactors

Group Member: RLP 0050 RLP 0051 RLP 0052

- 11 [40 CFR 60.700]
 - 12 [40 CFR 61.63]
 - 13 [40 CFR 63.113(a)(2)]
- NSPS Subpart RRR is superseded by HON Subpart G for Group 1 process vents per 40 CFR 63.110(d)(7).
40 CFR 61 Subpart F is superseded by HON Subpart G for Group 1 process vents per 40 CFR 63.110(f)(1).
Organic HAP >= 98 % reduction by weight, or <= 20 ppmv, whichever is less stringent, as determined using the methods in 40 CFR 63.116(c).
Subpart G. [40 CFR 63.113(a)(2)]
- Which Months: All Year Statistical Basis: None specified

SPECIFIC REQUIREMENTS

AI ID: 4013 - Georgia Gulf Lake Charles LLC - VCM Plant
Activity Number: PER20080004
Permit Number: 0520-00012-V1
Alt - Title V Regular Permit Minor Mod

CRG 0003 - Reactors

- 14 [40 CFR 63.113(c)(1)(ii)]
Halogenated vent streams: Hydrogen halides and halogens >= 95 % reduction, or reduce the outlet mass of total hydrogen halides and halogens < 0.45 kg/hr, whichever is less stringent, using a halogen reduction device. Subpart G. [40 CFR 63.113(c)(1)(ii)]
Which Months: All Year Statistical Basis: None specified
- 15 [40 CFR 63.113(c)(1)]
Halogenated vent streams: Convey vent stream exiting a combustion device to a halogen reduction device, such as a scrubber, before being discharged to the atmosphere. Subpart G. [40 CFR 63.113(c)(1)]
- 16 [40 CFR 63.117(a)]
Equipment/operational data recordkeeping by electronic or hard copy at the regulation's specified frequency. Keep up-to-date, readily accessible records of the data specified in 40 CFR 63.117(a)(4) through (a)(8), as applicable. Subpart G. [40 CFR 63.117(a)]

CRG 0004 - Storage Tanks (Group 1)

Group Member: EQT 0055EQT 0056EQT 0061EQT 0062EQT 0064EQT 0065EQT 0066EQT 0067EQT 0068EQT 0069EQT 0073EQT 0075EQT 0076EQT 0090

- 17 [40 CFR 60.110b]
NSPS Subpart Kb is superseded by HON Subpart G for storage vessels per 40 CFR 62.110(b). Subpart Kb.
Which Months: All Year Statistical Basis: None specified
- 18 [40 CFR 63.121, 122, 123]
Shall comply with all applicable requirements of 40 CFR 63.121, 122, 123. Subpart G.
- 19 [LAC 33:II.2|03.A]
Equip with a vapor loss control system, consisting of a gathering system capable of collecting volatile organic compound vapors and a vapor disposal system capable of processing such organic vapors. All tank gauging and sampling devices shall be gas-tight except when gauging or sampling is taking place.
- 20 [LAC 33:II.2|03.E.1]
VOC, Total >= 95 % control efficiency using a vapor loss control system. This limitation does not apply during periods of planned routine maintenance which may not exceed 240 hours per year.
- 21 [LAC 33:II.2|03.H.3]
Which Months: All Year Statistical Basis: None specified
- 22 [LAC 33:II.2|03.I.]
Determine VOC maximum true vapor pressure using the methods in LAC 33:III.2|03.H.3.a-e.
Equipment/operational data recordkeeping by electronic or hard copy at the regulation's specified frequency. Keep records of the information specified in LAC 33:III.2|03.I.1 - 7, as applicable.

CRG 0005 - Storage Tanks (Group 2)

Group Member: EQT 0073EQT 0077EQT 0078

- 23 [40 CFR 60.110b]
NSPS Subpart Kb is superseded by HON Subpart G for storage vessels per 40 CFR 62.110(b). Subpart Kb.
Which Months: All Year Statistical Basis: None specified
- 24 [40 CFR 63.123(b)]
Shall comply with all applicable recordkeeping requirements of 40 CFR 63.123(b). Subpart G. [40 CFR 63.123(b)]
- 25 [LAC 33:II.2|03.A]
Equip with a vapor loss control system, consisting of a gathering system capable of collecting volatile organic compound vapors and a vapor disposal system capable of processing such organic vapors. All tank gauging and sampling devices shall be gas-tight except when gauging or sampling is taking place.
- 26 [LAC 33:II.2|03.E.1]
VOC, Total >= 95 % control efficiency using a vapor loss control system. This limitation does not apply during periods of planned routine maintenance which may not exceed 240 hours per year.
- 27 [LAC 33:II.2|03.H.3]
Which Months: All Year Statistical Basis: None specified
- Determine VOC maximum true vapor pressure using the methods in LAC 33:III.2|03.H.3.a-e.

SPECIFIC REQUIREMENTS

AI ID: 4013 - Georgia Gulf Lake Charles LLC - VCM Plant
Activity Number: PER20080004
Permit Number: 0520-00012-V1
Air - Title V Regular Permit Minor Mod

CRG 0005 - Storage Tanks (Group 2)

Equipment/operational data recordkeeping by electronic or hard copy at the regulation's specified frequency. Keep records of the information specified in LAC 33:III.2103.I.1 - 7, as applicable.

EQT 0010 CT-50 - Main Plant Cooling Tower

- 29 [40 CFR 63.102(a)] Comply with the requirements of 40 CFR 63 Subparts G and H. Subpart F. [40 CFR 63.102(a)]
 Conduct performance tests and compliance determinations according to the schedule and procedures in 40 CFR 63.7(a) and the applicable sections of 40 CFR 63 Subparts G and H. Subpart F. [40 CFR 63.103(b)(1)]
- 30 [40 CFR 63.103(b)(1)] Submit Notification: Due at least 30 calendar days before a performance test is scheduled. Notify DEQ of the intention to conduct a performance test to allow DEQ the opportunity to have an observer present during the test. Subpart F. [40 CFR 63.103(b)(2)]
- 31 [40 CFR 63.103(b)(2)] Conduct performance tests according to the provisions in 40 CFR 63.7(e) of subpart A, except conduct performance tests at maximum representative operating conditions for the process. Subpart F. [40 CFR 63.103(b)(3)]
- 32 [40 CFR 63.103(b)(3)] Maintain all applicable records in such a manner that they can be readily accessed. Retain the most recent 6 months of records on site or make accessible by computer or other means that provides access within 2 hours after a request. Subpart F. [40 CFR 63.103(c)(1)]
- 33 [40 CFR 63.103(c)(1)] Equipment/operational data recordkeeping by electronic or hard copy upon occurrence of event. Maintain records specified in 40 CFR 63.103(c)(2)(i) through (iii), as well as records specified in 40 CFR 63 Subparts G and H. Subpart F. [40 CFR 63.103(c)(2)]
- 34 [40 CFR 63.103(c)(2)] Keep copies of all applicable reports and records required by 40 CFR 63 Subparts F, G, and H for at least 5 years. If 40 CFR 63 Subparts G or H require records to be maintained for a time period different than 5 years, maintain those records for the time specified in 40 CFR 63 Subparts G or H. Subpart F. [40 CFR 63.103(c)]
- 35 [40 CFR 63.103(c)] Heat exchange systems: Maintain, at all times, the monitoring plan currently in use. Maintain on-site, or accessible from a central location by computer or other means that provide access within 2 hours after a request. If a monitoring plan is superseded, retain the most recent superseded plan at least until 5 years from the date of its creation. Retain the superseded plan on-site (or accessible from a central location by computer or other means that provides access within 2 hours after a request) for at least 6 months after its creation. Subpart F. [40 CFR 63.104(c)(3)]
- 36 [40 CFR 63.104(c)(3)] Heat exchange systems: Prepare and implement a monitoring plan that documents the procedures that will be used to detect leaks of process fluids into cooling water. Require monitoring of one or more surrogate indicators or monitoring of one or more process parameters or other conditions that indicate a leak. Include the information specified in 40 CFR 63.104(c)(1)(i) and (ii). Monitor no less frequently than monthly for the first six months and quarterly thereafter to detect leaks. If a substantial leak is identified by methods other than those described in the monitoring plan and method(s) specified in the plan could not detect the leak, revise the plan and document the basis for the changes. Complete revisions to the plan no later than 180 days after discovery of the leak. Subpart F. [40 CFR 63.104(c)]
- 37 [40 CFR 63.104(c)] Heat exchange systems: Repair leaks as soon as practicable but not later than 45 calendar days after receiving results of monitoring tests indicating a leak, if a leak is detected according to the criteria of 40 CFR 63.104(b) or (c). Once the leak has been repaired, confirm that the heat exchange system has been repaired within 7 calendar days of the repair or startup, whichever is later. Subpart F. [40 CFR 63.104(d)]
- 38 [40 CFR 63.104(d)] Heat exchange systems: Equipment/operational data recordkeeping by electronic or hard copy at the regulation's specified frequency. Retain the records identified in 40 CFR 63.104(f)(1)(i) through (iv) as specified in 40 CFR 63.103(c)(1). Subpart F. [40 CFR 63.104(f)]
- 39 [40 CFR 63.104(f)] Maintenance wastewater: Incorporate the procedures described in 40 CFR 63.105(b) and (c) as part of the start-up, shutdown and malfunction plan required under 40 CFR 63.6(e)(3). Subpart F. [40 CFR 63.105(d)]

SPECIFIC REQUIREMENTS

AIR ID: 4013 - Georgia Gulf Lake Charles LLC - VCM Plant
Activity Number: PER20080004
Permit Number: 0520-00012-V1
Air - Title V Regular Permit Minor Mod

EQT 0010 CT-50 - Main Plant Cooling Tower

- 41 [40 CFR 63.105(e)] Maintenance wastewater: Equipment/operational data recordkeeping by electronic or hard copy at the approved frequency. Maintain a record of the information required by 40 CFR 63.105(b) and (c) as part of the start-up, shut-down, and malfunction plan required under 40 CFR 63.6(e)(3). Subpart F. [40 CFR 63.105(e)]
- 42 [40 CFR 63.105] Maintenance wastewater: Prepare a description of maintenance procedures for the management of wastewaters generated from the emptying and purging of equipment in the process during temporary shutdowns for inspections, maintenance, and repair and during periods which are not shutdowns as specified in 40 CFR 63.105(b)(1) through (b)(3). Modify and update the information required by 40 CFR 63.105(b) as needed following each maintenance procedure based on the actions taken and the wastewaters generated in the preceding maintenance procedure. Subpart F.

Include emissions of all toxic air pollutants listed in LAC 33:III.5112, Table 51.1 or 51.3 in the Annual Emissions Report unless exempted under LAC 33:III.5105.B.

Except periods of non-operation of exchangers served by this cooling tower resulting in cessation of VOC emissions, emissions from this cooling tower shall be controlled in accordance with Appendix B - Cooling Tower Fugitive Emission Control Plan.

EQT 0011 CT-950 - Thermal Oxidizer Cooling Tower

- 45 [40 CFR 63.102(a)] Comply with the requirements of 40 CFR 63 Subparts G and H. Subpart F. [40 CFR 63.102(a)]
- 46 [40 CFR 63.103(b)(1)] Conduct performance tests and compliance determinations according to the schedule and procedures in 40 CFR 63.7(a) and the applicable sections of 40 CFR 63 Subparts G and H. Subpart F. [40 CFR 63.103(b)(1)]
- 47 [40 CFR 63.103(b)(2)] Submit Notification: Due at least 30 calendar days before a performance test is scheduled. Notify DEQ of the intention to conduct a performance test to allow DEQ the opportunity to have an observer present during the test. Subpart F. [40 CFR 63.103(b)(2)]
- 48 [40 CFR 63.103(b)(3)] Conduct performance tests according to the provisions in 40 CFR 63.7(e) of subpart A, except conduct performance tests at maximum representative operating conditions for the process. Subpart F. [40 CFR 63.103(b)(3)]
- 49 [40 CFR 63.103(c)(1)] Maintain all applicable records in such a manner that they can be readily accessed. Retain the most recent 6 months of records on site or make accessible by computer or other means that provides access within 2 hours after a request. Subpart F. [40 CFR 63.103(c)(1)]
- 50 [40 CFR 63.103(c)(2)] Equipment/operational data recordkeeping by electronic or hard copy upon occurrence of event. Maintain records specified in 40 CFR 63.103(c)(2)(i) through (iii), as well as records specified in 40 CFR 63 Subparts G and H. Subpart F. [40 CFR 63.103(c)(2)]
- 51 [40 CFR 63.103(c)] Keep copies of all applicable reports and records required by 40 CFR 63 Subparts F, G, and H for at least 5 years. If 40 CFR 63 Subparts G or H require records to be maintained for a time period different than 5 years, maintain those records for the time specified in 40 CFR 63 Subparts G or H. Subpart F. [40 CFR 63.103(c)]
- 52 [40 CFR 63.104(b)] Heat exchange systems (cooling water): HAP monitored by the regulation's specified method(s) monthly for the first 6 months and quarterly thereafter to detect leaks. Monitor for total volatile organic compounds, total organic carbon, one or more specialized HAP compounds, or other representative substances that would indicate the presence of a leak in the heat exchange system. Subpart F. [40 CFR 63.104(b)]
- 53 [40 CFR 63.104(d)] Which Months: All Year Statistical Basis: None specified

Heat exchange systems: Repair leaks as soon as practicable but not later than 45 calendar days after receiving results of monitoring tests indicating a leak, if a leak is detected according to the criteria of 40 CFR 63.104(b) or (c). Once the leak has been repaired, confirm that the heat exchange system has been repaired within 7 calendar days of the repair or startup, whichever is later. Subpart F. [40 CFR 63.104(d)]

SPECIFIC REQUIREMENTS

AI ID: 4013 - Georgia Gulf Lake Charles LLC - VCM Plant
 Activity Number: PER20080004
 Permit Number: 0520-00012-V1
 Air - Title V Regular Permit Minor Mod

EQT 0011 CT-950 - Thermal Oxidizer Cooling Tower

- 54 [40 CFR 63.104(f)] Heat exchange systems: Equipment/operational data recordkeeping by electronic or hard copy at the regulation's specified frequency. Retain the records identified in 40 CFR 63.104(f)(1) through (iv) as specified in 40 CFR 63.103(c)(1). Subpart F. [40 CFR 63.104(f)]
- 55 [40 CFR 63.105(d)] Maintenance wastewater: Incorporate the procedures described in 40 CFR 63.105(b) and (c) as part of the start-up, shutdown and malfunction plan required under 40 CFR 63.5(e)(3). Subpart F. [40 CFR 63.105(d)]
- 56 [40 CFR 63.105(e)] Maintenance wastewater: Equipment/operational data recordkeeping by electronic or hard copy at the approved frequency. Maintain a record of the information required by 40 CFR 63.105(b) and (c) as part of the start-up, shut-down, and malfunction plan required under 40 CFR 63.6(e)(3). Subpart F. [40 CFR 63.105(e)]
- 57 [40 CFR 63.105] Maintenance wastewater: Prepare a description of maintenance procedures for the management of wastewaters generated from the emptying and purging of equipment in the process during temporary shutdowns for inspections, maintenance, and repair and during periods which are not shutdowns as specified in 40 CFR 63.105(b)(1) through (b)(3). Modify and update the information required by 40 CFR 63.105(b) as needed following each maintenance procedure based on the actions taken and the wastewaters generated in the preceding maintenance procedure. Subpart F.
- 58 [LAC 33:III.5107.A.2] Include emissions of all toxic air pollutants listed in LAC 33:III.5112, Table 51.1 or 51.3 in the Annual Emissions Report unless exempted under LAC 33:III.5105.B.
- 59 [LAC 33:III.5109.A.1] Compliance with NESHAP 40 CFR 63 Subpart F has been determined to be compliance with MACT in accordance with LAC 33:III.5109.A.2.

EQT 0012 C-500 - Emergency Scrubber

- 60 [LAC 33:III.5107.A.2] Include emissions of all toxic air pollutants listed in LAC 33:III.5112, Table 51.1 or 51.3 in the Annual Emissions Report unless exempted under LAC 33:III.5105.B.
- 61 [LAC 33:III.5109.A.1] Emissions are controlled by scrubber- Determined as MACT.

EQT 0013 L-962 - Muriatic Acid Loading Rack

- 62 [LAC 33:III.5107.A.2] Emits Class III TAP only. Chapter 51 MACT is not required. Include emissions of all toxic air pollutants listed in LAC 33:III.5112, Table 51.1 or 51.3 in the Annual Emissions Report unless exempted under LAC 33:III.5105.B.

EQT 0014 R-201A - EDC Cracking Furnace No. 1

- 63 [LAC 33:III.1101.B] Opacity <= 20 percent, except during the cleaning of a fire box or building of a new fire, soot blowing or lancing, charging of an incinerator, equipment changes, ash removal or rapping of precipitators, which may have an opacity in excess of 20 percent for not more than one six-minute period in any 60 consecutive minutes.
 Which Months: All Year Statistical Basis: None specified
 Opacity <= 20 percent; except emissions may have an average opacity in excess of 20 percent for not more than one six-minute period in any 60 consecutive minutes.
 Which Months: All Year Statistical Basis: Six-minute average
- 64 [LAC 33:III.1311.C]

SPECIFIC REQUIREMENTS

AI ID: 4013 - Georgia Gulf Lake Charles LLC - VCM Plant
 Activity Number: PER20080004
 Permit Number: 0520-00012-V1
 Air - Title V Regular Permit Minor Mod

EQT 0014 R-201A - EDC Cracking Furnace No. 1

- 65 [LAC 33:III.1313.C] Total suspended particulate <= 0.6 lb/MMBTU of heat input.
 Which Months: All Year Statistical Basis: None specified
 Include emissions of all toxic air pollutants listed in LAC 33:III.5112, Table 51.1 or 51.3 in the Annual Emissions Report unless exempted under LAC 33:III.5105.B.
- 66 [LAC 33:III.5107.A.2] Emissions are controlled by furnace combustion - Determined as MACT.
- 67 [LAC 33:III.5109.A.1]

EQT 0015 R-201B - EDC Cracking Furnace No. 2

- 68 [LAC 33:III.1101.B] Opacity <= 20 percent, except during the cleaning of a fire box or building of a new fire, soot blowing or lancing, charging of an incinerator, equipment changes, ash removal or rapping of precipitators, which may have an opacity in excess of 20 percent for not more than one six-minute period in any 60 consecutive minutes.
 Which Months: All Year Statistical Basis: None specified
 Opacity <= 20 percent; except emissions may have an average opacity in excess of 20 percent for not more than one six-minute period in any 60 consecutive minutes.
- 69 [LAC 33:III.1311.C] Which Months: All Year Statistical Basis: Six-minute average
 Total suspended particulate <= 0.6 lb/MMBTU of heat input.
 Which Months: All Year Statistical Basis: None specified
 Include emissions of all toxic air pollutants listed in LAC 33:III.5112, Table 51.1 or 51.3 in the Annual Emissions Report unless exempted under LAC 33:III.5105.B.
- 70 [LAC 33:III.1313.C] Emissions are controlled by furnace combustion - Determined as MACT.
- 71 [LAC 33:III.5107.A.2]
- 72 [LAC 33:III.5109.A.1]

EQT 0016 R-201C - EDC Cracking Furnace No. 3

- 73 [LAC 33:III.1101.B] Opacity <= 20 percent, except during the cleaning of a fire box or building of a new fire, soot blowing or lancing, charging of an incinerator, equipment changes, ash removal or rapping of precipitators, which may have an opacity in excess of 20 percent for not more than one six-minute period in any 60 consecutive minutes.
 Which Months: All Year Statistical Basis: None specified
 Opacity <= 20 percent; except emissions may have an average opacity in excess of 20 percent for not more than one six-minute period in any 60 consecutive minutes.
- 74 [LAC 33:III.1311.C] Which Months: All Year Statistical Basis: Six-minute average
 Total suspended particulate <= 0.6 lb/MMBTU of heat input.
 Which Months: All Year Statistical Basis: None specified
 Include emissions of all toxic air pollutants listed in LAC 33:III.5112, Table 51.1 or 51.3 in the Annual Emissions Report unless exempted under LAC 33:III.5105.B.
- 75 [LAC 33:III.1313.C] Emissions are controlled by furnace combustion - Determined as MACT.
- 76 [LAC 33:III.5107.A.2]
- 77 [LAC 33:III.5109.A.1]

EQT 0018 T-70 - Sulfuric Acid Tank

SPECIFIC REQUIREMENTS

AI ID: 4013 - Georgia Gulf Lake Charles LLC - VCM Plant
Activity Number: PER20080004
Permit Number: 0520-00012-V1
 Air - Title V Regular Permit Minor Mod

EQT 0018 T-70 - Sulfuric Acid Tank

78 [LAC 33:III.5107.A.2] Emits Class III TAP only. Chapter 51 MACT is not required. Include emissions of all toxic air pollutants listed in LAC 33:III.5112, Table 51.1 or 51.3 in the Annual Emissions Report unless exempted under LAC 33:III.5105.B.

EQT 0019 T-75 - Sulfuric Acid Tank

79 [LAC 33:III.5107.A.2] Emits Class III TAP only. Chapter 51 MACT is not required. Include emissions of all toxic air pollutants listed in LAC 33:III.5112, Table 51.1 or 51.3 in the Annual Emissions Report unless exempted under LAC 33:III.5105.B.

EQT 0020 T-82 - Gasoline Storage Tank

80 [LAC 33:III.2103.A] Equip with a submerged fill pipe.
 Equipment/operational data recordkeeping by electronic or hard copy at the regulation's specified frequency. Keep records of the information specified in LAC 33:III.2103.I.1 - 7, as applicable.
 Emits Class I and/or Class II TAP less than the MER (facility wide). Chapter 51 MACT is not required. Include emissions of all toxic air pollutants listed in LAC 33:III.5112, Table 51.1 or 51.3 in the Annual Emissions Report unless exempted under LAC 33:III.5105.B.

EQT 0021 S-201A - Decoking Scrubber No. 1

83 [LAC 33:III.1311.C] Opacity <= 20 percent; except emissions may have an average opacity in excess of 20 percent for not more than one six-minute period in any 60 consecutive minutes.
 Which Months: All Year Statistical Basis: Six-minute average

EQT 0022 S-201B - Decoking Scrubber No. 2

84 [LAC 33:III.1311.C] Opacity <= 20 percent; except emissions may have an average opacity in excess of 20 percent for not more than one six-minute period in any 60 consecutive minutes.
 Which Months: All Year Statistical Basis: Six-minute average

EQT 0023 S-201C - Decoking Scrubber No. 3

85 [LAC 33:III.1311.C] Opacity <= 20 percent; except emissions may have an average opacity in excess of 20 percent for not more than one six-minute period in any 60 consecutive minutes.
 Which Months: All Year Statistical Basis: Six-minute average

EQT 0024 T-421 - Caustic Storage Tank

86 [40 CFR 63.123(a)] Equipment/operational data recordkeeping by electronic or hard copy at the approved frequency. Keep readily accessible records showing the dimensions of the storage vessel and an analysis showing the capacity of the storage vessel. Keep the records as long as the storage vessel retains Group 2 status and is in operation. Subpart G. [40 CFR 63.123(a)]

SPECIFIC REQUIREMENTS

AID: 4013 - Georgia Gulf Lake Charles LLC - VCM Plant
Activity Number: PER20080004
Permit Number: 0520-00012-V1
Air - Title V Regular Permit Minor Mod

EQT 0024 T-421 - Caustic Storage Tank

87 [LAC 33:III.5109.A.1] Compliance with NESHAP 40 CFR 63 Subpart G has been determined to be compliance with MACT in accordance with LAC 33:III.5109.A.2.

EQT 0025 T-500 - Process Area Stormwater Tank

88 [LAC 33:III.5107.A.2] Include emissions of all toxic air pollutants listed in LAC 33:III.5112, Table 51.1 or 51.3 in the Annual Emissions Report unless exempted under LAC 33:III.5105.B.
 89 [LAC 33:III.5109.A.1] Stormwater storage tank. No control is required.

EQT 0026 T-544 - Process Area Stormwater Tank

90 [LAC 33:III.5107.A.2] Include emissions of all toxic air pollutants listed in LAC 33:III.5112, Table 51.1 or 51.3 in the Annual Emissions Report unless exempted under LAC 33:III.5105.B.
 91 [LAC 33:III.5109.A.1] Stormwater storage tank with low VOC emissions. No control is required.

EQT 0027 T-545 - Process Area Stormwater Tank

92 [LAC 33:III.5107.A.2] Include emissions of all toxic air pollutants listed in LAC 33:III.5112, Table 51.1 or 51.3 in the Annual Emissions Report unless exempted under LAC 33:III.5105.B.
 93 [LAC 33:III.5109.A.1] Stormwater storage tank with low VOC emissions. No control is required.

EQT 0028 T-547 - Stormwater/Treated Process Water Tank

94 [LAC 33:III.5107.A.2] Include emissions of all toxic air pollutants listed in LAC 33:III.5112, Table 51.1 or 51.3 in the Annual Emissions Report unless exempted under LAC 33:III.5105.B.
 95 [LAC 33:III.5109.A.1] Stormwater/treated process wastewater storage tank. No control is required.

EQT 0029 T-552 - Stormwater/Treated Process Water Tank

96 [LAC 33:III.5107.A.2] Include emissions of all toxic air pollutants listed in LAC 33:III.5112, Table 51.1 or 51.3 in the Annual Emissions Report unless exempted under LAC 33:III.5105.B.
 97 [LAC 33:III.5109.A.1] Stormwater/treated process wastewater storage tank. No control is required.

EQT 0030 T-701 - Caustic Storage Tank

98 [LAC 33:III.5107.A.2] Emits Class I and/or Class II TAP less than the MER (facility wide). Chapter 51 MACT is not required. Include emissions of all toxic air pollutants listed in LAC 33:III.5112, Table 51.1 or 51.3 in the Annual Emissions Report unless exempted under LAC 33:III.5105.B.

SPECIFIC REQUIREMENTS

AI ID: 4013 - Georgia Gulf Lake Charles LLC - VCM Plant
Activity Number: PER20080004
Permit Number: 0520-00012-V1
Air - Title V Regular Permit Minor Mod

EQT 0031 T-770 - Block 4 Stormwater Tank

99 [LAC 33:III.5107.A.2] Include emissions of all toxic air pollutants listed in LAC 33:III.5112, Table 51.1 or 51.3 in the Annual Emissions Report unless exempted under LAC 33:III.5105.B.

100 [LAC 33:III.5109.A.1] Stormwater storage tank with low VOC emissions. No control is required.

EQT 0032 T-772 - Block 3 Stormwater Tank

101 [LAC 33:III.5107.A.2] Include emissions of all toxic air pollutants listed in LAC 33:III.5112, Table 51.1 or 51.3 in the Annual Emissions Report unless exempted under LAC 33:III.5105.B.

102 [LAC 33:III.5109.A.1] Stormwater storage tank with low VOC emissions. No control is required.

EQT 0033 T-902 - Stormwater /Treated Process Water Tank

103 [LAC 33:III.5107.A.2] Include emissions of all toxic air pollutants listed in LAC 33:III.5112, Table 51.1 or 51.3 in the Annual Emissions Report unless exempted under LAC 33:III.5105.B.

104 [LAC 33:III.5109.A.1] Stormwater/treated process wastewater storage tank. No control is required.

EQT 0034 T-960A - Muriatic Acid Storage Tank

105 [LAC 33:III.5107.A.2] Emits Class III TAP only. Chapter 51 MACT is not required. Include emissions of all toxic air pollutants listed in LAC 33:III.5112, Table 51.1 or 51.3 in the Annual Emissions Report unless exempted under LAC 33:III.5105.B.

EQT 0035 T-960B - Muriatic Acid Storage Tank

106 [LAC 33:III.5107.A.2] Emits Class III TAP only. Chapter 51 MACT is not required. Include emissions of all toxic air pollutants listed in LAC 33:III.5112, Table 51.1 or 51.3 in the Annual Emissions Report unless exempted under LAC 33:III.5105.B.

EQT 0036 T-962A - Muriatic Acid Storage Tank

107 [LAC 33:III.5107.A.2] Emits Class III TAP only. Chapter 51 MACT is not required. Include emissions of all toxic air pollutants listed in LAC 33:III.5112, Table 51.1 or 51.3 in the Annual Emissions Report unless exempted under LAC 33:III.5105.B.

EQT 0037 T-962B - Muriatic Acid Storage Tank

108 [LAC 33:III.5107.A.2] Emits Class III TAP only. Chapter 51 MACT is not required. Include emissions of all toxic air pollutants listed in LAC 33:III.5112, Table 51.1 or 51.3 in the Annual Emissions Report unless exempted under LAC 33:III.5105.B.

EQT 0038 T-986 - Caustic Storage Tank

SPECIFIC REQUIREMENTS

AID: 4013 - Georgia Gulf Lake Charles LLC - VCM Plant
Activity Number: PER20080004
Permit Number: 0520-00012-V1
Air - Title V Regular Permit Minor Mod

EQT 0038 T-986 - Caustic Storage Tank

109 [LAC 33:II.5]07.A.2]

Emits Class I and/or Class II TAP less than the MER (facility wide). Chapter 51 MACT is not required. Include emissions of all toxic air pollutants listed in LAC 33:III.5112, Table 51.1 or 51.3 in the Annual Emissions Report unless exempted under LAC 33:III.5105.B.

EQT 0039 VS-901 - I-901 A/B Thermal Oxidizers

110 [40 CFR 60.660]

NSPS Subpart NNN is superseded by HON Subpart G for Group 1 process vents per 40 CFR 63.110(d)(4).

111 [40 CFR 61.65(b)]

Vinyl chloride <= 10 ppm. Subpart F. [40 CFR 61.65(b)]

Which Months: All Year Statistical Basis: Three-hour average

112 [40 CFR 61.65(d)(1)]

Vinyl chloride <= 10 ppm as determined by the continuous emission monitor system required under 40 CFR 61.68. Subpart F. [40 CFR

61.65(d)(1)]

Which Months: All Year Statistical Basis: Three-hour average

113 [40 CFR 61.67(b)]

Provide DEQ at least 30 days prior notice of an emission test to afford DEQ the opportunity to have an observer present during the test. Subpart F. [40 CFR 61.67(b)]

114 [40 CFR 61.67(e)]

Submit test results: Due before the close of the next business day following the determination of vinyl chloride emissions. Submit the results by registered letter. Subpart F. [40 CFR 61.67(e)]

115 [40 CFR 61.67(f)]

Performance Test Data recordkeeping by electronic or hard copy as needed. Retain at the plant and make available, upon request, for inspection by DEQ, records of emission test results and other data needed to determine emissions. Retain records for a minimum of three years. Subpart F. [40 CFR 61.67(f)]

116 [40 CFR 61.68(c)]

Conduct a daily span check for each vinyl chloride monitoring system used, as specified. Subpart F. [40 CFR 61.68(c)]

117 [40 CFR 61.68(d)]

Calculate the vinyl chloride content of emissions by best practical engineering judgment based on the discharge duration and known vinyl chloride concentrations in the affected equipment as determined in accordance with 40 CFR 61.67(h) or other acceptable method, for exhaust gases having emission limits that are subject to the requirement of 40 CFR 61.68(a) that are emitted to the atmosphere without passing through the control system and required vinyl chloride monitoring system. Subpart F. [40 CFR 61.68(d)]

118 [40 CFR 61.68(f)]

Equipment/operational data recordkeeping by electronic or hard copy upon occurrence of event. For each vinyl chloride emission to the atmosphere determined in accordance with 40 CFR 61.68(c) to be in excess of the applicable emission limits, record the identity of the source(s), the date, time and duration of the excess emission, the cause of the excess emission, and the approximate total vinyl chloride loss during the excess emission, and the method used for determining the vinyl chloride loss. Retain and make available for inspection by DEQ as required by 40 CFR 61.71(a). Subpart F. [40 CFR 61.68(f)]

119 [40 CFR 61.68]

Vinyl chloride monitored by continuous emission monitor (CEM) continuously. Monitor emissions from the sources for which emission limits are prescribed in 40 CFR 61.62(a) and (b), 61.63(a), and 61.64(a)(1), (b), (c) and (d), and for any control system to which reactor emissions are required to be ducted in 40 CFR 61.64(a)(2) or to which fugitive emissions are required to be ducted in 40 CFR 61.65(b)(1)(ii) and (b)(2), (b)(5), (b)(6)(ii) and (b)(9)(ii). Use a device that meets the requirements in 40 CFR 61.68(b). Subpart F.

120 [40 CFR 61.71(a)]

Which Months: All Year Statistical Basis: None specified Equipment/operational data recordkeeping by electronic or hard copy at the regulation's specified frequency. Record the information specified in 40 CFR 61.71(a)(1) through (a)(4) and make it available for inspection to DEQ for a minimum of three years. Subpart F. [40 CFR 61.71(a)]

SPECIFIC REQUIREMENTS

AI ID: 4013 - Georgia Gulf Lake Charles LLC - VCM Plant
 Activity Number: PER20080004
 Permit Number: 0520-00012-V1
 Air - Title V Regular Permit Minor Mod

EQT 0039 VS-901 - I-901 A/B Thermal Oxidizers

- Organic HAP $\geq 98\%$ reduction by weight, or ≤ 20 ppmv, whichever is less stringent, as determined using the methods in 40 CFR 63.116(c).
 For combustion devices, calculate emission reduction or concentration on a dry basis, corrected to 3-percent oxygen. Subpart G. [40 CFR 63.113(a)(2)]
- Which Months: All Year Statistical Basis: None specified
 Conduct a performance test to determine compliance with the control efficiency or emission limits for hydrogen halides and halogens. Use the procedures in 40 CFR 63.116(d)(1) through (d)(5). Subpart G. [40 CFR 63.116(d)]
 Equipment/operational data recordkeeping by electronic or hard copy at the regulation's specified frequency. Keep up-to-date, readily accessible records of the data specified in 40 CFR 63.117(a)(4) through (a)(8), as applicable. Subpart G. [40 CFR 63.117(a)]
 Equipment/operational data recordkeeping by electronic or hard copy at the regulation's specified frequency. Keep up-to-date, readily accessible records of the data specified in 40 CFR 63.118(a)(1) through (a)(4). Subpart G. [40 CFR 63.118(a)]
 Inlet emissions: Organic HAP $\geq 95\%$ reduction, except as provided in 40 CFR 63.119(e)(2). If a flare is used, it shall meet the specifications described in the general control device requirements of 40 CFR 63.11(b). Subpart G. [40 CFR 63.119(e)(1)]
- Which Months: All Year Statistical Basis: None specified
 December 31, 1992 is designed to reduce inlet emissions of total organic HAP by greater than or equal to 90 percent but less than 95 percent.
 Subpart G. [40 CFR 63.119(e)(2)]
- Which Months: All Year Statistical Basis: None specified
 Do not exceed 240 hours per year of periods of planned routine maintenance of the control device, during which the control device does not meet the specifications of 40 CFR 63.119(e)(1) or (e)(2). Subpart G. [40 CFR 63.119(e)(3)]
 Prepare a design evaluation, which includes the information specified in 40 CFR 63.120(d)(1)(i), or submit the results of a performance test as described in 40 CFR 63.120(d)(1)(ii). Subpart G. [40 CFR 63.120(d)(1)]
 Monitor the parameters specified in the Notification of Compliance Status required in 40 CFR 63.15(b) or in the operating permit and operate and maintain the control device such that the monitored parameters remain within the ranges specified in the Notification of Compliance Status. Subpart G. [40 CFR 63.120(d)(5)]
 Submit, as part of the Notification of Compliance Status required by 40 CFR 63.151(b): A monitoring plan containing the information specified in 40 CFR 63.120(d)(2)(i) and in either (d)(2)(ii) or (d)(2)(iii); and the information specified in 40 CFR 63.120(d)(3)(i) and, if applicable, (d)(3)(ii). Subpart G. [40 CFR 63.120(d)]
 Equipment/operational data recordkeeping by electronic or hard copy at the regulation's specified frequency. Keep records of the information specified in 40 CFR 63.129(a) through (f). Subpart G.
- Design, operate and inspect in accordance with the requirements of 40 CFR 63.139. Subpart G. [40 CFR 63.133(b)(2)]
- Closed-vent system: Design, operate and inspect in accordance with the requirements of 40 CFR 63.148, except as provided in 40 CFR 63.133(b)(4). Subpart G. [40 CFR 63.133(b)(3)]
 Ensure that the control device is operating whenever organic hazardous air pollutants emissions are vented to the control device. Subpart G. [40 CFR 63.139(b)]
- Total Organic HAP or Total Organic Compounds (less methane and ethane) $\geq 95\%$ reduction by weight. Subpart G. [40 CFR 63.139(c)(1)(i)]
 Which Months: All Year Statistical Basis: None specified

SPECIFIC REQUIREMENTS

AI ID: 4013 - Georgia Gulf Lake Charles LLC - VCM Plant
 Activity Number: PER20080004
 Permit Number: 0520-00012-V1
 Air - Title V Regular Permit Minor Mod

EQT 0039 VS-901 I-901 A/B Thermal Oxidizers

- 136 [40 CFR 63.139(d)] Demonstrate that each control device or combination of control devices achieves the appropriate conditions specified in 40 CFR 63.139(c) by using one or more of the methods specified in 40 CFR 63.138(d)(1), (d)(2), or (d)(3), except as specified in (d)(4). Subpart G. [40 CFR 63.139(d)]
- 137 [40 CFR 63.139(f)] Make a first attempt at repair as soon as practicable but no later than 5 calendar days after identification of gaps, cracks, tears, or holes in ductwork, piping, or connections to covers and control devices during an inspection. Complete repairs no later than 15 calendar days after identification or discovery of the defect. Subpart G. [40 CFR 63.139(f)]
- 138 [40 CFR 63.143(e)(1)] Comply with the monitoring requirements specified in 40 CFR 63 Subpart G Table 13. Subpart G. [40 CFR 63.143(e)(1)]
- 139 [40 CFR 63.148(b)(1)(i)] Vapor collection system or closed vent system (hard-piping): Organic HAP monitored by 40 CFR 60, Appendix A, Method 21 once initially according to the procedures in 40 CFR 63.148(c). Subpart G. [40 CFR 63.148(b)(1)(i)]
- 140 [40 CFR 63.148(b)(1)(ii)] Which Months: All Year Statistical Basis: None specified Vapor collection system or closed vent system (hard-piping): Presence of a leak monitored by visual, audible, and/or olfactory annually. Subpart G. [40 CFR 63.148(b)(1)(ii)]
- 141 [40 CFR 63.148(b)(2)(i)] Which Months: All Year Statistical Basis: None specified Vapor collection system or closed vent system (ductwork): Organic HAP monitored by 40 CFR 60, Appendix A, Method 21 once initially according to the procedures in 40 CFR 63.148(c). Subpart G. [40 CFR 63.148(b)(2)(i)]
- 142 [40 CFR 63.148(b)(2)(ii)] Which Months: All Year Statistical Basis: None specified Vapor collection system or closed vent system (ductwork): Organic HAP monitored by 40 CFR 60, Appendix A, Method 21 annually according to the procedures in 40 CFR 63.148(c). Subpart G. [40 CFR 63.148(b)(2)(ii)]
- 143 [40 CFR 63.148(b)(2)(iii)] Which Months: All Year Statistical Basis: None specified Vapor collection system or closed vent system (ductwork): Presence of a leak monitored by visual, audible, and/or olfactory annually. Subpart G. [40 CFR 63.148(b)(2)(iii)]
- 144 [40 CFR 63.148(b)(3)] Which Months: All Year Statistical Basis: None specified Fixed roof, cover, or enclosure: Presence of a leak monitored by visual, audible, and/or olfactory once initially and once every six months as specified in 40 CFR 63.133 through 63.137. Subpart G. [40 CFR 63.148(b)(3)]
- 145 [40 CFR 63.148(d)] Which Months: All Year Statistical Basis: None specified Repair leaks (as indicated by an instrument reading greater than 500 ppm above background or by visual inspections) as soon as practicable, except as provided in 40 CFR 63.148(e). Make a first attempt at repair no later than 5 calendar days after the leak is detected. Complete repairs no later than 15 calendar days after the leak is detected, except as provided in 40 CFR 63.148(d)(3). Subpart G. [40 CFR 63.148(d)]
- 146 [40 CFR 63.148(i)(2)] Vapor collection system or closed vent system (bypass lines): Seal or closure mechanism monitored by visual inspection/determination monthly to ensure the valve is maintained in the closed position and the vent stream is not diverted through the bypass line. Subpart G. [40 CFR 63.148(i)(2)]
- 147 [40 CFR 63.148(i)(2)] Which Months: All Year Statistical Basis: None specified Vapor collection system or closed vent system (bypass lines): Secure the bypass line valve in the closed position with a car-seal or a lock-and-key type configuration. Subpart G. [40 CFR 63.148(i)(2)]
- 148 [40 CFR 63.148(i)] Equipment/operational data recordkeeping by electronic or hard copy at the regulation's specified frequency. Keep records of the information specified in 40 CFR 63.148(i)(1) through (i)(6). Subpart G. [40 CFR 63.148(i)]

SPECIFIC REQUIREMENTS

AI ID: 4013 - Georgia Gulf Lake Charles LLC - VCM Plant
Activity Number: PER20080004
Permit Number: 0520-00012-V1
Air - Title V Regular Permit Minor Mod

EQT 0039 VS-901 - I-901 A/B Thermal Oxidizers

- 149 [40 CFR 63.148(j)] Submit the information specified in 40 CFR 63.148(j)(1) through (j)(3) with the reports required by 40 CFR 63.182(b) of subpart H or 40 CFR 63.152(c). Subpart G. [40 CFR 63.148(j)]
 Opacity <= 20 percent, except during the cleaning of a fire box or building of a new fire, soot blowing or lancing, charging of an incinerator, equipment changes, ash removal or rapping of precipitators, which may have an opacity in excess of 20 percent for not more than one six-minute period in any 60 consecutive minutes.
- 150 [LAC 33:III.1|01.B] Which Months: All Year Statistical Basis: None specified
 Opacity <= 20 percent; except emissions may have an average opacity in excess of 20 percent for not more than one six-minute period in any 60 consecutive minutes.

Which Months: All Year Statistical Basis: Six-minute average

Total suspended particulate <= 0.6 lb/MMBTU of heat input.

Which Months: All Year Statistical Basis: None specified
 Include emissions of all toxic air pollutants listed in LAC 33:III.5|12, Table 51.1 or 51.3 in the Annual Emissions Report unless exempted under LAC 33:III.5|05.B.
 Compliance with NESHAP 40 CFR 63 Subpart G has been determined to be compliance with MACT in accordance with LAC 33:III.5|09.A.2.

EQT 0040 EPG-1 - Emergency Power Generator

- 152 [LAC 33:III.1|01.C] Opacity <= 20 percent, except during the cleaning of a fire box or building of a new fire, soot blowing or lancing, charging of an incinerator, equipment changes, ash removal or rapping of precipitators, which may have an opacity in excess of 20 percent for not more than one six-minute period in any 60 consecutive minutes.
- 153 [LAC 33:III.5|07.A.2] Which Months: All Year Statistical Basis: None specified
 Opacity <= 20 percent; except emissions may have an average opacity in excess of 20 percent for not more than one six-minute period in any 60 consecutive minutes.
- 154 [LAC 33:III.5|09.A.1] Which Months: All Year Statistical Basis: Six-minute average

EQT 0041 EPG-2 - Emergency Power Generator

- 155 [LAC 33:III.1|01.B] Opacity <= 20 percent, except during the cleaning of a fire box or building of a new fire, soot blowing or lancing, charging of an incinerator, equipment changes, ash removal or rapping of precipitators, which may have an opacity in excess of 20 percent for not more than one six-minute period in any 60 consecutive minutes.
- 156 [LAC 33:III.1|01.C] Which Months: All Year Statistical Basis: None specified
 Opacity <= 20 percent; except emissions may have an average opacity in excess of 20 percent for not more than one six-minute period in any 60 consecutive minutes.
- 157 [LAC 33:III.1|01.B] Which Months: All Year Statistical Basis: Six-minute average

EQT 0042 AIR-1 - Diesel Air Compressor No. 1

SPECIFIC REQUIREMENTS

AI ID: 4013 - Georgia Gulf Lake Charles LLC - VCM Plant
 Activity Number: PER20080004
 Permit Number: 0520-00012.V1
 Air - Title V Regular Permit Minor Mod

EQT 0042 AIR-1 - Diesel Air Compressor No. 1

- 159 [40 CFR 60.4204(a)] If the rental engine is pre-2007 model year CI ICE, it must comply with the emission standards in Table 1 of 40 CFR 60 Subpart IIII. [40 CFR 60.4204(a)]
 160 [40 CFR 60.4204(b)] If the rental engine is 2007 model year and later CI ICE, it must comply with the emission standards for new CI engines in 40 CFR 60.4201(a).
 Subpart IIII. [40 CFR 60.4204(b)] Operate and maintain stationary CI ICE according to the manufacturer's written instructions or procedures developed by the owner or operator that are approved by the engine manufacturer, over the entire life of the engine. Subpart IIII.
 Beginning October 1, 2007, use diesel fuel that meets the requirements of 40 CFR 80.510(a). Subpart IIII. [40 CFR 60.4207(a)]
 Beginning October 1, 2010, use diesel fuel that meets the requirements of 40 CFR 80.510(b) for nonroad diesel fuel. Subpart IIII. [40 CFR 60.4207(b)] Operate and maintain the stationary CI internal combustion engine and control device according to the manufacturer's written instructions or procedures developed by the owner or operator that are approved by the engine manufacturer. In addition, only change those settings that are permitted by the manufacturer. Also meet the requirements of 40 CFR 89, 94 and/or 1068, as applicable. Subpart IIII. [40 CFR 60.4211(a)] through (b)(5). Subpart IIII. [40 CFR 60.4211(b)] If the rental engine is 2007 model year CI ICE, demonstrate compliance according to one of the methods specified in 40 CFR 60.4211(b)(1) through (b)(5). Subpart IIII. [40 CFR 60.4211(b)] If the rental engine is 2007 model year and later CI ICE, ensure engine is certified to the emission standards in 40 CFR 60.4204(b), or 40 CFR 60.4025(b) or (c), as applicable, for the same model year and maximum (or in the case of fire pumps, NFPA nameplate) engine power. Install and configure according to the manufacturer's specifications. Subpart IIII. [40 CFR 60.4211(c)] Comply with 40 CFR 63 Subpart IIII. [40 CFR 63.6590(c)] Opacity <= 20 percent, except during the cleaning of a fire box or building of a new fire, soot blowing or lancing, charging of an incinerator, equipment changes, ash removal or rapping of precipitators, which may have an opacity in excess of 20 percent for not more than one six-minute period in any 60 consecutive minutes.
 Which Months: All Year Statistical Basis: None specified
 Opacity <= 20 percent; except emissions may have an average opacity in excess of 20 percent for not more than one six-minute period in any 60 consecutive minutes.
 Which Months: All Year Statistical Basis: Six-minute average

EQT 0043 AIR-2 - Diesel Air Compressor No. 2

- 170 [40 CFR 60.4204(a)] If the rental engine is pre-2007 model year CI ICE, it must comply with the emission standards in Table 1 of 40 CFR 60 Subpart IIII. [40 CFR 60.4204(a)]
 171 [40 CFR 60.4204(b)] If the rental engine is 2007 model year and later CI ICE, it must comply with the emission standards for new CI engines in 40 CFR 60.4201(a).
 Subpart IIII. [40 CFR 60.4204(b)] Operate and maintain stationary CI ICE according to the manufacturer's written instructions or procedures developed by the owner or operator that are approved by the engine manufacturer, over the entire life of the engine. Subpart IIII.
 Beginning October 1, 2007, use diesel fuel that meets the requirements of 40 CFR 80.510(a). Subpart IIII. [40 CFR 60.4207(a)]
 Beginning October 1, 2010, use diesel fuel that meets the requirements of 40 CFR 80.510(b) for nonroad diesel fuel. Subpart IIII. [40 CFR 60.4207(b)]

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EQT 0043 AIR-2 - Diesel Air Compressor No. 2

Operate and maintain the stationary CI internal combustion engine and control device according to the manufacturer's written instructions or procedures developed by the owner or operator that are approved by the engine manufacturer. In addition, only change those settings that are permitted by the manufacturer. Also meet the requirements of 40 CFR 89, 94 and/or 1068, as applicable. Subpart III. [40 CFR 60.4211(a)]

If the rental engine is pre-2007 model year CI ICE, demonstrate compliance according to one of the methods specified in 40 CFR 60.4211(b)(1) through (b)(5). Subpart III. [40 CFR 60.4211(b)]

If the rental engine is 2007 model year and later CI ICE, ensure engine is certified to the emission standards in 40 CFR 60.4204(b), or 40 CFR 60.4025(b) or (c), as applicable, for the same model year and maximum (or in the case of fire pumps, NFPA nameplate) engine power. Install and configure according to the manufacturer's specifications. Subpart III. [40 CFR 60.4211(c)]

Comply with 40 CFR 63 Subpart III. [40 CFR 63.6590(c)]

Opacity <= 20 percent, except during the cleaning of a fire box or building of a new fire, soot blowing or lancing, charging of an incinerator, equipment changes, ash removal or rapping of precipitators, which may have an opacity in excess of 20 percent for not more than one six-minute period in any 60 consecutive minutes.

Which Months: All Year Statistical Basis: None specified

Opacity <= 20 percent; except emissions may have an average opacity in excess of 20 percent for not more than one six-minute period in any 60 consecutive minutes.

Which Months: All Year Statistical Basis: Six-minute average

EQT 0044 AIR-3 - Diesel Air Compressor No. 3

Opacity <= 20 percent, except during the cleaning of a fire box or building of a new fire, soot blowing or lancing, charging of an incinerator, equipment changes, ash removal or rapping of precipitators, which may have an opacity in excess of 20 percent for not more than one six-minute period in any 60 consecutive minutes.

Which Months: All Year Statistical Basis: None specified

Opacity <= 20 percent; except emissions may have an average opacity in excess of 20 percent for not more than one six-minute period in any 60 consecutive minutes.

Which Months: All Year Statistical Basis: Six-minute average

EQT 0045 T-546 - Process Area Stormwater Collection Tank

Include emissions of all toxic air pollutants listed in LAC 33:III.5112, Table 51.1 or 51.3 in the Annual Emissions Report unless exempted under LAC 33:II.5105.B.

Stormwater storage tank with low VOC emissions. No control is required.

EQT 0047 T-102 - Caustic Decanter (constructed after 7/23/1984)

185 [40 CFR 60.110b] NSPS Subpart Kb is superseded by HON Subpart G for storage vessels per 40 CFR 62.110(b). Subpart Kb.

186 [40 CFR 63.121, 122, 123] Shall comply with all applicable requirements of 40 CFR 63.121, 122, 123. Subpart G.

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EQT 0047 T-102 - Caustic Decanter (constructed after 7/23/1984)

- 187 [LAC 33:III.2103.A] Equip with a vapor loss control system, consisting of a gathering system capable of collecting volatile organic compound vapors and a vapor disposal system capable of processing such organic vapors. All tank gauging and sampling devices shall be gas-tight except when gauging or sampling is taking place.
- 188 [LAC 33:III.2103.E.1] VOC, Total \geq 95 % control efficiency using a vapor loss control system. This limitation does not apply during periods of planned routine maintenance which may not exceed 240 hours per year.
 Which Months: All Year Statistical Basis: None specified
 Determine VOC maximum true vapor pressure using the methods in LAC 33:III.2103.H.3.a-e.
 Equipment/operational data recordkeeping by electronic or hard copy at the regulation's specified frequency. Keep records of the information specified in LAC 33:III.2103.I.1 - 7, as applicable.

EQT 0048 T-103A - Acid Wash Tank (constructed after 7/23/1984)

- 189 [LAC 33:III.2103.H.3] Shall comply with all applicable requirements of 40 CFR 63.170. Subpart H.
- 190 [LAC 33:III.2103.I] Equip with a vapor loss control system, consisting of a gathering system capable of collecting volatile organic compound vapors and a vapor disposal system capable of processing such organic vapors. All tank gauging and sampling devices shall be gas-tight except when gauging or sampling is taking place.
- 191 [40 CFR 63.170] VOC, Total \geq 95 % control efficiency using a vapor loss control system. This limitation does not apply during periods of planned routine maintenance which may not exceed 240 hours per year.
 Which Months: All Year Statistical Basis: None specified
 Determine VOC maximum true vapor pressure using the methods in LAC 33:III.2103.H.3.a-e.
 Equipment/operational data recordkeeping by electronic or hard copy at the regulation's specified frequency. Keep records of the information specified in LAC 33:III.2103.I.1 - 7, as applicable.

EQT 0051 T-204 - HCl storage Tank (constructed after 7/23/1984)

- 192 [LAC 33:III.2103.A] Maintain working pressures sufficient at all times under normal operating conditions to prevent vapor or gas loss to the atmosphere.

EQT 0052 T-401A - VCM Check Sphere (constructed after 7/23/1984)

- 193 [LAC 33:III.2103.B] Maintain working pressures sufficient at all times under normal operating conditions to prevent vapor or gas loss to the atmosphere.

EQT 0053 T-401B - VCM Check Sphere (constructed after 7/23/1984)

- 194 [LAC 33:III.2103.H.3] Maintain working pressures sufficient at all times under normal operating conditions to prevent vapor or gas loss to the atmosphere.

EQT 0054 T-401C - VCM Check Sphere (constructed after 7/23/1984)

- 195 [LAC 33:III.2103.I] Maintain working pressures sufficient at all times under normal operating conditions to prevent vapor or gas loss to the atmosphere.

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EQT 0054 T-401C - VCM Check Sphere (constructed after 7/23/1984)

199 [LAC 33:III.2103.B] Maintain working pressures sufficient at all times under normal operating conditions to prevent vapor or gas loss to the atmosphere.

EQT 0057 T-411A - VCM Storage Sphere (constructed after 7/23/1984)

200 [LAC 33:III.2103.B] Maintain working pressures sufficient at all times under normal operating conditions to prevent vapor or gas loss to the atmosphere.

EQT 0058 T-411B - VCM Storage Sphere (constructed after 7/23/1984)

201 [LAC 33:III.2103.B] Maintain working pressures sufficient at all times under normal operating conditions to prevent vapor or gas loss to the atmosphere.

EQT 0059 T-411C - VCM Storage Sphere (constructed after 7/23/1984)

202 [LAC 33:III.2103.B] Maintain working pressures sufficient at all times under normal operating conditions to prevent vapor or gas loss to the atmosphere.

EQT 0060 T-411D - VCM Storage Sphere (constructed after 7/23/1984)

203 [LAC 33:III.2103.B] Maintain working pressures sufficient at all times under normal operating conditions to prevent vapor or gas loss to the atmosphere.

EQT 0069 T-490 - Vinyl Vent Recovery Storage (constructed after 7/23/1984)

204 [LAC 33:III.2103.B] Maintain working pressures sufficient at all times under normal operating conditions to prevent vapor or gas loss to the atmosphere.

EQT 0070 T-491 - Car Loading Recovery Storage (constructed after 7/23/1984)

205 [LAC 33:III.2103.B] Maintain working pressures sufficient at all times under normal operating conditions to prevent vapor or gas loss to the atmosphere.

EQT 0072 T-506 - Economizer and Knock Out (constructed after 7/23/1984)

206 [LAC 33:III.2103.B] Maintain working pressures sufficient at all times under normal operating conditions to prevent vapor or gas loss to the atmosphere.

EQT 0077 T-601 - HCI Column Vent Control Storage (constructed after 7/23/1984)

207 [LAC 33:III.2103.B] Maintain working pressures sufficient at all times under normal operating conditions to prevent vapor or gas loss to the atmosphere.

FUG 0001 FE-1 - Process Equipment Fugitives

208 [40 CFR 60.480] Comply with NSPS Subpart VV by implementing the Louisiana Consolidated Fugitive Emission Program Guidelines. Compliance is achieved through compliance with 40 CFR 63 Subpart H.

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- 209 [40 CFR 61.240] Comply with 40 CFR 61 Subpart V by implementing the Louisiana Consolidated Fugitive Emission Program Guidelines. Compliance is achieved through compliance with 40 CFR 63 Subpart H.
- 210 [40 CFR 61.65(b)] Shall comply the requirements of 40 CFR 61.65(b)(8)(i). Comply with other requirements of 40 CFR 61 Subpart F by implementing the Louisiana Consolidated Fugitive Emission Program Guidelines. Compliance is achieved through compliance with 40 CFR 63 Subpart H. [40 CFR 61.65(b)]
- 211 [40 CFR 63.162(c)] Identify each piece of equipment in a process unit such that it can be distinguished readily from equipment that is not subject to 40 CFR 63 Subpart H. Subpart H. [40 CFR 63.162(c)]
- 212 [40 CFR 63.162(f)] Clearly identify leaking equipment, for leaking equipment detected as specified in 40 CFR 63.163, 40 CFR 63.164, 40 CFR 63.168, 40 CFR 63.169, and 40 CFR 63.172 through 63.174. The identification may be removed after the equipment is repaired, except for valves or for connectors subject to 40 CFR 63.174(c)(1)(i). The identification on a valve may be removed after it has been monitored as specified in 40 CFR 63.168(f)(3) and 63.175(e)(1)(D), and no leak has been detected during the follow-up monitoring. If electing to comply using the provisions of 40 CFR 63.174(c)(1)(i), the identification on a connector may be removed after it is monitored as specified in 40 CFR 63.174(c)(1)(i) and no leak is detected during that monitoring. Subpart H. [40 CFR 63.162(f)]
- Pumps in light liquid service: Organic HAP monitored by 40 CFR 60, Appendix A, Method 21 monthly to detect leaks, except as provided in 40 CFR 63.162(b) and 63.163(e) through (j). If a reading of 10,000 ppm (phase I); 5,000 ppm (phase II); or 5,000 ppm (phase III), pumps handling polymerizing monomers), 2,000 ppm (phase III, pumps in food/medical service), or 1,000 ppm (phase III, all other pumps) or greater is recorded, a leak is detected, initiate repair provisions specified in 40 CFR 63.163(c). Subpart H. [40 CFR 63.163(b)(1)]
- Which Months: All Year Statistical Basis: None specified
- Pumps in light liquid service: Presence of a leak monitored by visual inspection/determination weekly (calendar). Monitor for indications of liquids dripping from the pump seal. If there are indications of liquids dripping from the pump seal, a leak is detected. If a leak is detected, initiate the repair provisions specified in 40 CFR 63.163(c). Subpart H. [40 CFR 63.163(b)(3)]
- Which Months: All Year Statistical Basis: None specified
- Pumps in light liquid service: Make a first attempt at repair no later than 5 calendar days after a leak is detected, and complete repairs no later than 15 calendar days after the leak is detected, except as provided in 40 CFR 63.163(c)(3) and 40 CFR 63.171. Subpart H. [40 CFR 63.163(c)]
- Pumps in light liquid service: Implement a quality improvement program for pumps that complies with the requirements of 40 CFR 63.176, if, in Phase III, calculated on a 6-month rolling average, the greater of either 10 percent of the pumps in a process unit or three pumps in a process unit leak. Subpart H. [40 CFR 63.163(d)(2)]
- Pumps in light liquid service: Determine percent leaking pumps using the equation in 40 CFR 63.163(d)(4). Subpart H. [40 CFR 63.163(d)(4)]
- Pumps in light liquid service (dual mechanical seal system): Operate with the barrier fluid at a pressure that is at all times greater than the pump stuffing box pressure; or equip with a barrier fluid degassing reservoir that is connected to a process or fuel gas system or connected by a closed-loop system to a control device that complies with the requirements of 40 CFR 63.172; or equip with a closed-loop system that purges the barrier fluid into a process stream. Comply with this requirement instead of the requirements in 40 CFR 63.163(a) through (d). Subpart H. [40 CFR 63.163(e)(1)]
- Pumps in light liquid service (dual mechanical seal system): Ensure that the barrier fluid is not in light liquid service. Comply with this requirement instead of the requirements in 40 CFR 63.163(a) through (d). Subpart H. [40 CFR 63.163(e)(2)]

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- 220 [40 CFR 63.163(e)(3)] Pumps in light liquid service (dual mechanical seal system): Equip barrier fluid system with a sensor that will detect failure of the seal system, barrier fluid system, or both. Comply with this requirement instead of the requirements in 40 CFR 63.163(a) through (d). Subpart H. [40 CFR 63.163(e)(3)]
- 221 [40 CFR 63.163(e)(4)] Pumps in light liquid service (dual mechanical seal system): Presence of a leak monitored by visual inspection/determination weekly (calendar). Monitor for indications of liquids dripping from the pump seal. If there are indications of liquid dripping from the pump seal at the time of the weekly inspection, monitor the pump as specified in 40 CFR 63.180(b) to determine if there is a leak of organic HAP in the barrier fluid. If an instrument reading of 1,000 ppm or greater is measured, a leak is detected. If a leak is detected, initiate the repair provisions in 40 CFR 63.163(e)(6). Comply with this requirement instead of the requirements in 40 CFR 63.163(a) through (d). Subpart H. [40 CFR 63.163(e)(4)]
- Which Months: All Year Statistical Basis: None specified
- 222 [40 CFR 63.163(e)(6)(i)] Pumps in light liquid service (dual mechanical seal system): Determine, based on design considerations and operating experience, criteria that indicates failure of the seal system, the barrier fluid system, or both. Comply with this requirement instead of the requirements in 40 CFR 63.163(a) through (d). Subpart H. [40 CFR 63.163(e)(6)(i)]
- 223 [40 CFR 63.163(e)(6)] Pumps in light liquid service (dual mechanical seal system): Make a first attempt at repair no later than 5 calendar days after each leak is detected, and complete repairs no later than 15 calendar days after the leak is detected, except as provided in 40 CFR 63.171. Comply with this requirement instead of the requirements in 40 CFR 63.163(a) through (d). Subpart H. [40 CFR 63.163(e)(6)]
- 224 [40 CFR 63.163(e)] Pumps in light liquid service (dual mechanical seal system - sensor): Equipment/operational data monitored by visual inspection/determination daily, or equip with an audible alarm unless the pump is located within the boundary of an unmanned plant site. If the sensor indicates failure of the seal system, the barrier fluid system, or both based on the criteria established in 40 CFR 63.163(e)(6), a leak is detected. If a leak is detected, initiate repair provisions specified in 40 CFR 63.163(e)(6). Comply with this requirement instead of the requirements in 40 CFR 63.163(a) through (d). Subpart H. [40 CFR 63.163(e)]
- Which Months: All Year Statistical Basis: None specified
- 225 [40 CFR 63.163(h)] Pumps in light liquid service (unmanned plant site): Presence of a leak monitored by visual inspection/determination at the regulation's specified frequency. Monitor each pump as often as practicable and at least monthly. Comply with this requirement instead of the weekly visual inspection requirement of 40 CFR 63.163(b)(3) and (e)(4), and the daily requirements of 40 CFR 63.163(e)(5). Subpart H. [40 CFR 63.163(h)]
- Which Months: All Year Statistical Basis: None specified
- 226 [40 CFR 63.163(j)(1)] Pumps in light liquid service (unsafe-to-monitor): Determine that the pump is unsafe-to-monitor because monitoring personnel would be exposed to an immediate danger as a consequence of complying with 40 CFR 63.163(b) through (e). Subpart H. [40 CFR 63.163(j)(1)]
- 227 [40 CFR 63.163(j)(2)] Pumps in light liquid service (unsafe-to-monitor): Organic HAP monitored by 40 CFR 60, Appendix A, Method 21 at the regulation's specified frequency. Maintain a written plan that requires monitoring of the pump as frequently as practicable during safe-to-monitor times but not more frequently than the periodic monitoring schedule otherwise applicable. Comply with this requirement instead of the requirements in 40 CFR 63.163(b) through (e). Subpart H. [40 CFR 63.163(j)(2)]
- Which Months: All Year Statistical Basis: None specified
- 228 [40 CFR 63.164(a)] Compressors: Equip with a seal system that includes a barrier fluid system and that prevents leakage of process fluid to the atmosphere, except as provided in 40 CFR 63.162(b) and 40 CFR 63.164(h) and (i). Subpart H. [40 CFR 63.164(a)]

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- 229 [40 CFR 63.164(b)]
 Compressors: Operate the seal system with the barrier fluid at a pressure that is greater than the compressor stuffing box pressure, or equip with a barrier fluid system degassing reservoir that is routed to a process or fuel gas system or connected by a closed-vent system to a control device that complies with the requirements of 40 CFR 63.172; or equip with a closed-loop system that purges the barrier fluid directly into a process stream. Subpart H. [40 CFR 63.164(b)]
- 230 [40 CFR 63.164(c)]
 Compressors: Ensure that the barrier fluid is not in liquid service. Subpart H. [40 CFR 63.164(c)]
- 231 [40 CFR 63.164(d)]
 Compressors: Equip each barrier fluid system as described in 40 CFR 63.164(a) through (c) with a sensor that will detect failure of the seal system, barrier fluid system, or both. Subpart H. [40 CFR 63.164(d)]
- 232 [40 CFR 63.164(e)(2)]
 Compressors (sensor): Determine, based on design considerations and operating experience, a criterion that indicates failure of the seal system, the barrier fluid system, or both. Subpart H. [40 CFR 63.164(e)(2)]
- 233 [40 CFR 63.164(g)]
 Compressors: Make a first attempt at repair no later than 5 calendar days after each leak is detected, and complete repairs no later than 15 calendar days after each leak is detected, except as provided in 40 CFR 63.171. Subpart H. [40 CFR 63.164(g)]
- 234 [40 CFR 63.164(i)(2)]
 Compressors (no detectable emissions): Organic HAP monitored by 40 CFR 60, Appendix A, Method 21 once initially and annually, and at other times requested by DEQ. Comply with this requirement instead of the requirements in 40 CFR 63.164(a) through (h). Subpart H. [40 CFR 63.164(i)(2)]
- 235 [40 CFR 63.164]
 Which Months: All Year Statistical Basis: None specified
 Compressors (sensor): Equipment/operational data monitored by visual inspection/determination daily, or equip with an alarm, unless the compressor is located within the boundary of an unmanned plant site. If the sensor indicates failure of the seal system, the barrier fluid system, or both based on the criterion determined under 40 CFR 63.164(e)(2), a leak is detected. If a leak is detected, initiate repair provisions specified in 40 CFR 63.164(b). Subpart H.
- 236 [40 CFR 63.165(a)]
 Which Months: All Year Statistical Basis: None specified
 Pressure relief device in gas/vapor service: Organic HAP < 500 ppm above background except during pressure releases, as determined by the method specified in 63.180(c). Subpart H. [40 CFR 63.165(a)]
- 237 [40 CFR 63.165(b)(1)]
 Which Months: All Year Statistical Basis: None specified
 Pressure relief devices in gas/vapor service: After each pressure release, return to a condition indicated by an instrument reading of less than 500 ppm above background, as soon as practicable, but no later than 5 calendar days after each pressure release, except as provided in 40 CFR 63.171. Subpart H. [40 CFR 63.165(b)(1)]
- 238 [40 CFR 63.165(b)(2)]
 Which Months: All Year Statistical Basis: None specified
 Pressure relief devices in gas/vapor service: Organic HAP monitored by 40 CFR 60, Appendix A, Method 21 within 5 days (calendar) after the pressure release and being returned to organic HAP service, to confirm the condition indicated by an instrument reading of less than 500 ppm above background, as measured by the method specified in 40 CFR 63.180(c). Subpart H. [40 CFR 63.165(b)(2)]
- 239 [40 CFR 63.165(d)(2)]
 Which Months: All Year Statistical Basis: None specified
 Pressure relief devices in gas/vapor service (rupture disk): After each pressure release, install a new rupture disk upstream of the pressure relief device as soon as practicable, but no later than 5 calendar days after each pressure release, except as provided in 40 CFR 63.171. Comply with this requirement instead of the requirements in 40 CFR 63.165(a) and (b). Subpart H. [40 CFR 63.165(d)(2)]
- 240 [40 CFR 63.166]
 Sampling connection systems: Equip with a closed-purge, closed-loop, or closed-vent system, except as provided in 40 CFR 63.162(b). Operate the system as specified in 40 CFR 63.166(b). Subpart H.

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- 241 [40 CFR 63.167] Open-ended valves or lines: Equip with a cap, blind flange, plug, or a second valve, except as provided in 40 CFR 63.162(b) and 40 CFR 63.167(d) and (e). Ensure that the cap, blind flange, plug or second valve seals the open end at all times except during operations requiring process fluid flow through the open-ended valve or line, or during maintenance or repair.. Operate each open-ended valve or line equipped with a second valve in a manner such that the valve on the process fluid end is closed before the second valve is closed. Subpart H.
- 242 [40 CFR 63.168(c)] Valves in gas/vapor service or light liquid service (Phase I): Organic HAP monitored by 40 CFR 60, Appendix A, Method 21 quarterly, as specified in 40 CFR 63.180(b). If an instrument reading of 10,000 ppm or greater is recorded, a leak is detected. If a leak is detected, initiate repair provisions in 40 CFR 63.168(f). Subpart H. [40 CFR 63.168(c)]
- Which Months: All Year Statistical Basis: None specified
- Valves in gas/vapor service or light liquid service (Phase II): Organic HAP monitored by 40 CFR 60, Appendix A, Method 21 quarterly, as specified in 40 CFR 63.180(b). If an instrument reading of 500 ppm or greater is recorded, a leak is detected. If a leak is detected, initiate repair provisions in 40 CFR 63.168(f). Subpart H. [40 CFR 63.168(c)]
- Which Months: All Year Statistical Basis: None specified
- Valves in gas/vapor service or light liquid service (Phase III, 2 percent or greater leaking valves): Organic HAP monitored by 40 CFR 60, Appendix A, Method 21 monthly, as specified in 40 CFR 63.180(b); or implement a quality improvement program for valves that complies with the requirements of 40 CFR 63.175 and monitor quarterly. If an instrument reading of 500 ppm or greater is recorded, a leak is detected. If a leak is detected, initiate repair provisions in 40 CFR 63.168(f). If electing to implement a quality improvement program, follow the procedures in 40 CFR 63.175. Subpart H. [40 CFR 63.168(d)(1)]
- Which Months: All Year Statistical Basis: None specified
- Valves in gas/vapor service or light liquid service (Phase III, less than 2 percent leaking valves): Organic HAP monitored by 40 CFR 60, Appendix A, Method 21 quarterly, as specified in 40 CFR 63.180(b). If an instrument reading of 500 ppm or greater is recorded, a leak is detected. If a leak is detected, initiate repair provisions in 40 CFR 63.168(f). Permittee may elect to comply with the alternate standards in 40 CFR 63.168(d)(3) and (d)(4). Subpart H. [40 CFR 63.168(d)(2)]
- Which Months: All Year Statistical Basis: None specified
- Valves in gas/vapor service or light liquid service: Determine percent leaking valves using the equation in 40 CFR 63.168(e)(1). Subpart H. [40 CFR 63.168(e)(1)]
- Valves in gas/vapor service or light liquid service (after leak repair): Organic HAP monitored by 40 CFR 60, Appendix A, Method 21 once within three months (at least) after repair to determine whether the valve has resumed leaking. Subpart H. [40 CFR 63.168(f)(3)]
- Which Months: All Year Statistical Basis: None specified
- Valves in gas/vapor service or light liquid service: Make a first attempt at repair no later than 5 calendar days after a leak is detected, and complete repairs no later than 15 calendar days after the leak is detected, except as provided in 40 CFR 63.171. Subpart H. [40 CFR 63.168(f)]
- Valves in gas/vapor service or light liquid service (unsafe-to-monitor): Demonstrate that the valve is unsafe to monitor because monitoring personnel would be exposed to an immediate danger as a consequence of complying with 40 CFR 63.168(b) through (d). Comply with this requirement instead of the requirements in 40 CFR 63.168(b) through (f). Subpart H. [40 CFR 63.168(h)(1)]

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- 250 [40 CFR 63.168(h)(2)] Valves in gas/vapor service or light liquid service (unsafe-to-monitor): Organic HAP monitored by 40 CFR 60, Appendix A, Method 21 at the regulation's specified frequency. Maintain a written plan that requires monitoring of the valves as frequently as practicable during safe-to-monitor times, but not more frequently than the periodic monitoring schedule otherwise applicable. Comply with this requirement instead of the requirements in 40 CFR 63.168(b) through (f). Subpart H. [40 CFR 63.168(h)(2)]
- Which Months: All Year Statistical Basis: None specified
- Valves in gas/vapor service or light liquid service (difficult-to-monitor): Demonstrate that the valve cannot be monitored without elevating the monitoring personnel more than 2 meters above a support surface or it is not accessible at anytime in a safe manner. Comply with this requirement instead of the requirements in 40 CFR 63.168(b) through (d). Subpart H. [40 CFR 63.168(i)(1)]
- 251 [40 CFR 63.168(i)(1)] Valves in gas/vapor service or light liquid service (difficult-to-monitor): Organic HAP monitored by 40 CFR 60, Appendix A, Method 21 annually. Maintain a written plan that requires monitoring of the valves at least once per calendar year. Comply with this requirement instead of the requirements in 40 CFR 63.168(b) through (d). Subpart H. [40 CFR 63.168(i)(3)]
- Which Months: All Year Statistical Basis: None specified
- Pumps, valves, connectors, and agitators in heavy liquid service; instrumentation systems; and pressure relief devices in liquid service: Organic HAP monitored by 40 CFR 60, Appendix A, Method 21 within 5 days (calendar) if evidence of a potential leak to the atmosphere is found by visible, audible, olfactory, or any other detection method. If a reading of 10,000 ppm for agitators, 5,000 ppm for pumps handling polymerizing monomers, 2,000 ppm for all other pumps (including pumps in food/medical service), or 500 ppm for valves, connectors, instrumentation systems, and pressure relief devices, or greater is recorded, a leak is detected. If a leak is detected, initiate repair provisions specified in 40 CFR 63.169(c). Subpart H. [40 CFR 63.169(a)]
- Which Months: All Year Statistical Basis: None specified
- Pumps, valves, connectors, and agitators in heavy liquid service; instrumentation systems; and pressure relief devices in liquid service: Make a first attempt at repair no later than 5 calendar days after each leak is detected, and complete repairs no later than 15 calendar days after it each leak is detected, except as provided in 40 CFR 63.171. Subpart H. [40 CFR 63.169(c)]
- Closed-vent system (hard-piping): Organic HAP monitored by 40 CFR 60, Appendix A, Method 21 once initially according to the procedures in 40 CFR 63.180(b). If an instrument reading greater than 500 ppm above background is recorded, a leak is detected. If a leak is detected, initiate repair provisions in 40 CFR 63.172(h). Subpart H. [40 CFR 63.172(h)(1)(i)]
- Which Months: All Year Statistical Basis: None specified
- Closed-vent system (hard-piping): Presence of a leak monitored by visual, audible, and/or olfactory annually. If a leak is detected, initiate repair provisions in 40 CFR 63.172(h). Subpart H. [40 CFR 63.172(h)(1)(ii)]
- Which Months: All Year Statistical Basis: None specified
- Closed-vent system (duct work): Organic HAP monitored by 40 CFR 60, Appendix A, Method 21 once initially according to the procedures in 40 CFR 63.180(b). If an instrument reading greater than 500 ppm above background is recorded, a leak is detected. If a leak is detected, initiate repair provisions in 40 CFR 63.172(h). Subpart H. [40 CFR 63.172(h)(2)(i)]
- Which Months: All Year Statistical Basis: None specified
- Closed-vent system (duct work): Organic HAP monitored by 40 CFR 60, Appendix A, Method 21 annually according to the procedures in 40 CFR 63.180(b). If an instrument reading greater than 500 ppm above background is recorded, a leak is detected. If a leak is detected, initiate repair provisions in 40 CFR 63.172(h). Subpart H. [40 CFR 63.172(h)(2)(ii)]

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- 259 [40 CFR 63.172(h)] Make a first attempt at repair no later than 5 calendar days after each leak is detected, and complete repairs no later than 15 calendar days after it each leak is detected, except as provided in 40 CFR 63.172(i). Subpart H. [40 CFR 63.172(h)]
- 260 [40 CFR 63.172(j)(2)] Closed-vent system (bypass lines): Seal or closure mechanism monitored by visual inspection/determination monthly to ensure the valve is maintained in the non-diverting position and the vent stream is not diverted through the bypass line. Subpart H. [40 CFR 63.172(j)(2)]
- Which Months: All Year Statistical Basis: None specified
- 261 [40 CFR 63.172(j)(2)] Closed-vent system (bypass lines): Secure the bypass line valve in the non-diverting position with a car-seal or a lock-and-key type configuration. Subpart H. [40 CFR 63.172(j)(2)]
- 262 [40 CFR 63.172(k)(1)] Closed-vent system (unsafe-to-inspect): Demonstrate that the equipment is unsafe to inspect because inspecting personnel would be exposed to an imminent or potential dangers as a consequence of complying with 40 CFR 63.172(f)(1) or (f)(2). Comply with this requirement instead of the requirements in 40 CFR 63.172(f)(1) and (f)(2). Subpart H. [40 CFR 63.172(k)(1)]
- 263 [40 CFR 63.172(k)(2)] Closed-vent system (unsafe-to-inspect): Organic HAP monitored by 40 CFR 60, Appendix A, Method 21 at the regulation's specified frequency. Maintain a written plan that requires inspection of the equipment as frequently as practicable during safe-to-inspect times, but not more frequently than annually. Comply with this requirement instead of the requirements in 40 CFR 63.172(f)(1) and (f)(2). Subpart H. [40 CFR 63.172(k)(2)]
- Which Months: All Year Statistical Basis: None specified
- Closed-vent system (difficult-to-inspect): Demonstrate that the equipment cannot be inspected without elevating the inspecting personnel more than 2 meters above a support surface. Comply with this requirement instead of the requirements in 40 CFR 63.172(f)(1) and (f)(2). Subpart H. [40 CFR 63.172(l)(1)]
- 264 [40 CFR 63.172(l)(2)] Closed-vent system (difficult-to-inspect): Organic HAP monitored by 40 CFR 60, Appendix A, Method 21 once every five years. Maintain a written plan that requires inspection of the equipment at least once every five years. Comply with this requirement instead of the requirements in 40 CFR 63.172(f)(1) and (f)(2). Subpart H. [40 CFR 63.172(l)(2)]
- Which Months: All Year Statistical Basis: None specified
- Ensure that the closed-vent system or control device is operating whenever organic HAP emissions are vented to the closed-vent system or control device. Subpart H. [40 CFR 63.172(m)]
- 265 [40 CFR 63.172(l)(2)] Agitators in gas/vapor service or light liquid service: Organic HAP monitored by 40 CFR 60, Appendix A, Method 21 monthly to detect leaks, as specified in 40 CFR 63.180(b). If an instrument reading of 10,000 ppm or greater is recorded, a leak is detected. If a leak is detected, initiate repair provisions in 40 CFR 63.173(c). Subpart H. [40 CFR 63.173(a)]
- Which Months: All Year Statistical Basis: None specified
- Agitators in gas/vapor service or light liquid service: Presence of a leak monitored by visual inspection/determination weekly (calendar) for indications of liquids dripping from the agitator. If there are indications of liquids dripping from the agitator, a leak is detected. If a leak is detected, initiate repair provisions in 40 CFR 63.173(c). Subpart H. [40 CFR 63.173(b)]
- Which Months: All Year Statistical Basis: None specified
- 266 [40 CFR 63.172(m)] Agitators in gas/vapor service or light liquid service: Make a first attempt at repair no later than 5 calendar days after each leak is detected, and complete repairs no later than 15 calendar days after it each leak is detected, except as provided in 40 CFR 63.171. Subpart H. [40 CFR 63.173(c)]
- 267 [40 CFR 63.173(a)]
- 268 [40 CFR 63.173(b)]
- 269 [40 CFR 63.173(c)]

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- 270 [40 CFR 63.173(d)(1)] Agitators in gas/vapor service and light liquid service (dual mechanical seal system): Operate with the barrier fluid at a pressure that is at all times greater than the agitator stuffing box pressure; or equip with a barrier fluid degassing reservoir that is routed to a process or fuel gas system or connected by a closed-vent system to a control device that complies with the requirements of 40 CFR 63.172; or equip with a closed-loop system that purges the barrier fluid into a process stream. Comply with this requirement instead of the requirements in 40 CFR 63.173(a). Subpart H. [40 CFR 63.173(d)(1)]
- Agitators in gas/vapor service and light liquid service (dual mechanical seal system): Ensure that the barrier fluid is not in light liquid organic HAP service. Comply with this requirement instead of the requirements in 40 CFR 63.173(a). Subpart H. [40 CFR 63.173(d)(2)]
- Agitators in gas/vapor service and light liquid service (dual mechanical seal system): Equip barrier fluid system with a sensor that will detect failure of the seal system, barrier fluid system, or both. Comply with this requirement instead of the requirements in 40 CFR 63.173(a). Subpart H. [40 CFR 63.173(d)(3)]
- Agitators in gas/vapor service or light liquid service (dual mechanical seal system): Presence of a leak monitored by visual inspection/determination weekly (calendar). Monitor for indications of liquids dripping from the agitator seal. If there are indications of liquid dripping from the agitator seal at the time of the weekly inspection, monitor the agitator as specified in 40 CFR 63.180(b) to determine the presence of organic HAP in the barrier fluid. If an instrument reading of 10,000 ppm or greater is measured, a leak is detected. If a leak is detected, initiate the repair provisions in 40 CFR 63.173(d)(6). Comply with this requirement instead of the requirements in 40 CFR 63.173(a). Subpart H. [40 CFR 63.173(d)(4)]
- Which Months: All Year Statistical Basis: None specified
- Agitators in gas/vapor service and light liquid service (dual mechanical seal system): Determine, based on design considerations and operating experience, criteria that indicates failure of the seal system, the barrier fluid system, or both. Comply with this requirement instead of the requirements in 40 CFR 63.173(a). Subpart H. [40 CFR 63.173(d)(6)(i)]
- Agitators in gas/vapor service and light liquid service (dual mechanical seal system): Make a first attempt at repair no later than 5 calendar days after each leak is detected, and complete repairs no later than 15 calendar days after the leak is detected, except as provided in 40 CFR 63.171.
- Comply with this requirement instead of the requirements in 40 CFR 63.173(a). Subpart H. [40 CFR 63.173(d)(6)(ii)]
- Agitators in gas/vapor service or light liquid service (dual mechanical seal system - sensor): Equipment/operational data monitored by visual inspection/determination daily, or equip with an audible alarm unless the agitator is located within the boundary of an unmanned plant site. If the sensor indicates failure of the seal system, the barrier fluid system, or both based on the criteria established in 40 CFR 63.173(d)(6), a leak is detected. If a leak is detected, initiate repair provisions specified in 40 CFR 63.173(d)(6). Comply with this requirement instead of the requirements in 40 CFR 63.173(a). Subpart H. [40 CFR 63.173(d)(7)]
- Which Months: All Year Statistical Basis: None specified
- Agitators in gas/vapor service or light liquid service (unmanned plant site): Presence of a leak monitored by visual inspection/determination at the regulation's specified frequency. Monitor each agitator as often as practicable and at least monthly. Comply with this requirement instead of the weekly visual inspection requirement of 40 CFR 63.173(b)(1) and (d)(4), and the daily requirements of 40 CFR 63.173(d)(5). Subpart H. [40 CFR 63.173(g)]
- Which Months: All Year Statistical Basis: None specified
- Agitators in gas/vapor service or light liquid service (difficult to monitor): Demonstrate that the agitator cannot be monitored without elevating the monitoring personnel more than two meters above a support surface or it is not accessible at anytime in a safe manner. Comply with this requirement instead of the requirements in 40 CFR 63.173(a) through (d). Subpart H. [40 CFR 63.173(h)(1)]

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- Agitators in gas/vapor service or light liquid service (difficult-to-monitor): Organic HAP monitored by 40 CFR 60, Appendix A, Method 21 annually. Maintain a written plan that requires monitoring of the agitator at least once per calendar year. Comply with this requirement instead of the requirements in 40 CFR 63.173(a) through (d). Subpart H. [40 CFR 63.173(h)(3)]
- Which Months: All Year Statistical Basis: None specified
- Agitators in gas/vapor service or light liquid service (unsafe-to-monitor): Demonstrate that the agitator is unsafe to monitor because monitoring personnel would be exposed to an immediate danger as a consequence of complying with 40 CFR 63.173(a) through (d). Comply with this requirement instead of the requirements in 40 CFR 63.173(a) through (d). Subpart H. [40 CFR 63.173(j)(1)]
- Agitators in gas/vapor service or light liquid service (unsafe-to-monitor): Organic HAP monitored by 40 CFR 60, Appendix A, Method 21 at the regulation's specified frequency. Maintain a written plan that requires monitoring of the agitator as frequently as practicable during safe-to-monitor times, but not more frequently than the periodic monitoring schedule otherwise applicable. Comply with this requirement instead of the requirements in 40 CFR 63.173(a) through (d). Subpart H. [40 CFR 63.173(j)(2)]
- Which Months: All Year Statistical Basis: None specified
- Connectors in gas/vapor service or light liquid service: Organic HAP monitored by 40 CFR 60, Appendix A, Method 21 once within 12 months after the compliance date, except as provided in 40 CFR 63.174(f) through (h). If an instrument reading of 500 ppm or greater is recorded, a leak is detected. If a leak is detected, initiate repair provisions in 40 CFR 63.174(d). Subpart H. [40 CFR 63.174(b)(1)]
- Which Months: All Year Statistical Basis: None specified
- Connectors in gas/vapor service or light liquid service (0.5% or greater leaking): Organic HAP monitored by 40 CFR 60, Appendix A, Method 21 annually. Subpart H. [40 CFR 63.174(b)(3)(i)]
- Which Months: All Year Statistical Basis: None specified
- Connectors in gas/vapor service or light liquid service (less than 0.5% leaking): Organic HAP monitored by 40 CFR 60, Appendix A, Method 21 once every two years. Subpart H. [40 CFR 63.174(b)(3)(ii)]
- Which Months: All Year Statistical Basis: None specified
- Connectors in gas/vapor service or light liquid service (opened or otherwise had the seal broken): Presence of a leak monitored by 40 CFR 60, Appendix A, Method 21 within three months after being returned to organic HAP service or when it is reconnected. If monitoring detects a leak, repair according to the provisions of 40 CFR 63.174(d), as specified, except as provided in 40 CFR 63.174(c)(1)(ii). Subpart H. [40 CFR 63.174(c)(1)(i)]
- Which Months: All Year Statistical Basis: None specified
- Connectors in gas/vapor service or light liquid service (2 inches or less in nominal diameter): Comply with the requirements of 40 CFR 63.169. Subpart H. [40 CFR 63.174(c)(2)(i)]
- Connectors in gas/vapor service or light liquid service (2 inches or less in nominal diameter): Organic HAP monitored by technically sound method within three months after being returned to organic HAP service after having been opened or otherwise had the seal broken. If monitoring detects a leak, implement repair provisions in 40 CFR 63.174(d). Subpart H. [40 CFR 63.174(c)(2)(ii)]
- Which Months: All Year Statistical Basis: None specified
- Connectors in gas/vapor service or light liquid service: Make a first attempt at repair no later than 5 calendar days after each leak is detected, and complete repairs no later than 15 calendar days after it each leak is detected, except as provided in 40 CFR 63.171 and 63.174(g). Subpart H. [40 CFR 63.174(d)]

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- 289 [40 CFR 63.174(n)(1)] Connectors in gas/vapor service or light liquid service (unsafe-to-monitor): Demonstrate that the connector is unsafe to monitor because personnel would be exposed to an immediate danger as a result of complying with 40 CFR 63.174(a) through (c). Comply with this requirement instead of the requirements in 40 CFR 63.174(a). Subpart H. [40 CFR 63.174(f)(1)]
- 290 [40 CFR 63.174(n)(2)] Connectors in gas/vapor service or light liquid service (unsafe-to-monitor): Organic HAP monitored by 40 CFR 60, Appendix A, Method 21 at the regulation's specified frequency. Maintain a written plan that requires monitoring of connectors as frequently as practicable during safe to monitor times, but not more frequently than the periodic schedule otherwise applicable. Comply with this requirement instead of the requirements in 40 CFR 63.174(a). Subpart H. [40 CFR 63.174(f)(2)]
- Which Months: All Year Statistical Basis: None specified
- Connectors in gas/vapor service or light liquid service (unsafe-to-repair): Demonstrate that repair personnel would be exposed to an immediate danger as a consequence of complying with 40 CFR 63.174(d). Comply with this requirement instead of the requirements in 40 CFR 63.174(a), (d), and (e). Subpart H. [40 CFR 63.174(g)]
- Connectors in gas/vapor service or light liquid service (inaccessible, ceramic, or ceramic-lined): Make a first attempt at repair within 5 days after leak is detected by visual, audible, olfactory or other means, and complete repairs no later than 15 calendar days after leak is detected, except as provided in 40 CFR 63.171 and 63.174(b). Comply with this requirement instead of the monitoring requirements of 40 CFR 63.174(a) and (c) and from the recordkeeping and reporting requirements of 40 CFR 63.181 and 63.182. Subpart H. [40 CFR 63.174(h)(2)]
- Connectors in gas/vapor service or light liquid service: Calculate percent leaking connectors as specified in 40 CFR 63.174(i)(1) and (i)(2). Subpart H. [40 CFR 63.174(j)]
- Comply with the test methods and procedures requirements provided in 40 CFR 63.180. Subpart H.
- Equipment/operational data recordkeeping by electronic or hard copy at the regulation's specified frequency. Maintain records as specified in 40 CFR 63.181(a) through (k). Subpart H.
- Submit Initial Notification: Due within 120 days after the date of promulgation of the subpart that references 40 CFR 63 Subpart H. Include the information specified in 40 CFR 63.182(b)(1). Subpart H. [40 CFR 63.182(b)]
- Submit Notification of Compliance Status: Due within 90 days of the compliance dates specified in the 40 CFR 63 subpart that references 40 CFR 63 Subpart H. Include the information specified in 40 CFR 63.182(c)(1) through (c)(3). Subpart H. [40 CFR 63.182(c)]
- Submit Periodic Reports: Due semiannually starting 6 months after the Notification of Compliance Status, as required in 40 CFR 63.182(c). Include the information specified in 40 CFR 63.182(d)(2) through (d)(4). Subpart H. [40 CFR 63.182(d)]
- Equip all rotary pumps and compressors handling volatile organic compounds having a true vapor pressure of 1.5 psia or greater at handling conditions with mechanical seals or other equivalent equipment.
- Comply with LAC 33:III.2122 by implementing the Louisiana Consolidated Fugitive Emission Program Guidelines. Compliance is achieved through compliance with 40 CFR 63 Subpart H.
- Shall comply the streamlined equipment leak monitoring program specified in Appendix A.
- Comply with LAC 33:III.5109 by implementing the Louisiana Consolidated Fugitive Emission Program Guidelines. Compliance is achieved through compliance with 40 CFR 63 Subpart H.

GRP 0004 R-201 CAP - EDC Cracking Furnace Emission Cap

Group Members: EQT 0014EQT 0015EQT 0016

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GRP 0004 R-201 CAP - EDC Cracking Furnace Emission Cap

303 [LAC 23:III.501.C.6]

Permittee shall demonstrate compliance with the limits listed below by recording heat input to the EDC Cracking Furnaces (Emission Points R-201A, R-201B, and R-201C). The fuel flow to each of the furnaces shall be measured continuously using temperature and pressure corrected flow meters and logged each day. Emissions shall be calculated based on the heat input to these furnaces and recorded each month. The calculated emissions for last twelve months shall also be recorded. These records shall be kept on site and available for inspection by the Office of Environmental Compliance, Surveillance Division. The heat input and emissions over the maximum given in this specific requirement for any twelve consecutive month period shall be considered a violation of this permit and must be reported to the Office of Environmental Compliance, Enforcement Division. A report showing the total heat input to and calculated emissions from these furnaces for the preceding calendar year shall be submitted to Office of Environmental Compliance, Enforcement Division by March 31.

Maximum Rate

PM10: 12.70 tons/year
 SO2: 0.48 tons/year
 NOX: 87.16 tons/year
 CO: 66.58 tons/year
 VOC: 4.38 tons/year
 Heat Input: 1,615,782 MM BTU/year.

GRP 0005 S-201 CAP - Decoking Scrubber Emission Cap

Group Members: EQT 0021EQT 0022EQT 0023

304 [LAC 23:III.501.C.6]

Permittee shall demonstrate compliance with the limits listed below by recording the number of decoking events each month. Emissions shall be calculated based on the number of decoking events. The calculated emissions for last twelve months shall also be recorded. These records shall be kept on site and available for inspection by the Office of Environmental Compliance, Surveillance Division. The number of decoking events and emissions over the maximum given in this specific condition for any twelve consecutive month period shall be considered a violation of this permit and must be reported to the Office of Environmental Compliance, Enforcement Division. A report showing the number of decoking events and calculated emissions from the scrubbers for the preceding calendar year shall be submitted to Office of Environmental Compliance, Enforcement Division by March 31.

Maximum Rate

PM10: 0.09 tons/year
 CO: 67.50 tons/year
 Number of Decoking Events: 16 times/year.

RLP 0039 F-412A,B,C,D - Tank Farm Carbon Adsorption System Vent (for Emergency)

305 [40 CFR 63.102(a)(4)]

Used for emergency (malfunction) events only. Shall implement, to the extent reasonably available, measures to prevent or minimize excess emissions to the extent practical. [40 CFR 63.102(a)(4)]

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RLP 0040 LAB-002 - Southwest Vent Stack

- 306 [40 CFR 61.65(b)(7)]
 Return unused portions of samples containing at least 10 percent by weight vinyl chloride to the process or destroy in a control device from which concentration of vinyl chloride in the exhaust gas does not exceed 10 ppm (average for 3-hour period) or equivalent as provided in 40 CFR 61.66. Subpart F. [40 CFR 61.65(b)(7)]
 Include emissions of all toxic air pollutants listed in LAC 33:III.5105.B.
 LAC 33:III.5105.B.
 The vinyl chloride emissions shall be controlled by a carbon absorption system with efficiency of 99% or greater (average per batch) - Determined as MACT.

RLP 0041 LAB-CAP - Laboratory Emissions

- 309 [40 CFR 61.65(b)(7)]
 Return unused portions of samples containing at least 10 percent by weight vinyl chloride to the process or destroy in a control device from which concentration of vinyl chloride in the exhaust gas does not exceed 10 ppm (average for 3-hour period) or equivalent as provided in 40 CFR 61.66. Subpart F. [40 CFR 61.65(b)(7)]
 Include emissions of all toxic air pollutants listed in LAC 33:III.5112, Table 51.1 or 51.3 in the Annual Emissions Report unless exempted under LAC 33:III.5105.B.
 The vinyl chloride emissions shall be controlled by a carbon absorption system with efficiency of 99% or greater (average per batch) - Determined as MACT.

RLP 0048 C-717 - Process Water Steam Stripper

- 312 [40 CFR 61.65(b)(9)]
 Shall meet the requirements for process water as specified in 40 CFR 61.65(b)(9). [40 CFR 61.65(b)(9)]
 Organic HAP \geq 98 % reduction by weight, or \leq 20 ppmv, whichever is less stringent, as determined using the methods in 40 CFR 63.116(c).
 Subpart G. [40 CFR 63.113(a)(2)]
 Which Months: All Year Statistical Basis: None specified
 Halogenated vent streams: Hydrogen halides and halogens \geq 95 % reduction, or reduce the outlet mass of total hydrogen halides and halogens $<$ 0.45 kg/hr, whichever is less stringent, using a halogen reduction device. Subpart G. [40 CFR 63.113(c)(1)(ii)]
 Which Months: All Year Statistical Basis: None specified
 Halogenated vent streams: Convey vent stream exiting a combustion device to a halogen reduction device, such as a scrubber, before being discharged to the atmosphere. Subpart G. [40 CFR 63.113(c)(1)]
 Equipment/operational data recordkeeping by electronic or hard copy at the regulation's specified frequency. Keep up-to-date, readily accessible records of the data specified in 40 CFR 63.117(a)(4) through (a)(8), as applicable. Subpart G. [40 CFR 63.117(a)]

RLP 0049 C-717B - Stormwater Stripper

- 317 [40 CFR 61.65(b)(9)]
 Shall meet the requirements for process water as specified in 40 CFR 61.65(b)(9). [40 CFR 61.65(b)(9)]

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RLP 0049 C-717B - Stormwater Stripper

318	[40 CFR 63.113(a)(2)]	Organic HAP $\geq 98\%$ reduction by weight, or ≤ 20 ppmv, whichever is less stringent, as determined using the methods in 40 CFR 63.116(c). Subpart G. [40 CFR 63.113(a)(2)]
319	[40 CFR 63.113(c)(1)(ii)]	Which Months: All Year Statistical Basis: None specified Halogenated vent streams: Hydrogen halides and halogens $\geq 95\%$ reduction, or reduce the outlet mass of total hydrogen halides and halogens < 0.45 kg/hr, whichever is less stringent, using a halogen reduction device. Subpart G. [40 CFR 63.113(c)(1)(ii)]
320	[40 CFR 63.113(c)(1)]	Which Months: All Year Statistical Basis: None specified Halogenated vent streams: Convey vent stream exiting a combustion device to a halogen reduction device, such as a scrubber, before being discharged to the atmosphere. Subpart G. [40 CFR 63.113(c)(1)]
321	[40 CFR 63.117(a)]	Equipment/operational data recordkeeping by electronic or hard copy at the regulation's specified frequency. Keep up-to-date, readily accessible records of the data specified in 40 CFR 63.117(a)(4) through (a)(8), as applicable. Subpart G. [40 CFR 63.117(a)]

RLP 0053 R-301/302/303 - Oxychlorination Reactors

322	[40 CFR 60.700]	NSPS Subpart RRR is superseded by HON Subpart G for Group 1 process vents per 40 CFR 63.110(d)(7).
323	[40 CFR 61.62(b)]	Emissions of vinyl chloride to the atmosphere shall not exceed 0.0002lb/lb of the 100% EDC from the process (3-hr average). [40 CFR 61.62(b)]
324	[40 CFR 63.113(a)(2)]	Organic HAP $\geq 98\%$ reduction by weight, or ≤ 20 ppmv, whichever is less stringent, as determined using the methods in 40 CFR 63.116(c). Subpart G. [40 CFR 63.113(a)(2)]
325	[40 CFR 63.113(c)(1)(ii)]	Which Months: All Year Statistical Basis: None specified Halogenated vent streams: Hydrogen halides and halogens $\geq 95\%$ reduction, or reduce the outlet mass of total hydrogen halides and halogens < 0.45 kg/hr, whichever is less stringent, using a halogen reduction device. Subpart G. [40 CFR 63.113(c)(1)(ii)]
326	[40 CFR 63.113(c)(1)]	Which Months: All Year Statistical Basis: None specified Halogenated vent streams: Convey vent stream exiting a combustion device to a halogen reduction device, such as a scrubber, before being discharged to the atmosphere. Subpart G. [40 CFR 63.113(c)(1)]
327	[40 CFR 63.117(a)]	Equipment/operational data recordkeeping by electronic or hard copy at the regulation's specified frequency. Keep up-to-date, readily accessible records of the data specified in 40 CFR 63.117(a)(4) through (a)(8), as applicable. Subpart G. [40 CFR 63.117(a)]

UNF 0001 - VCM Plant

328	[40 CFR 60.]	All affected facilities shall comply with all applicable provisions in 40 CFR 60 Subpart A.
329	[40 CFR 61.145(b)(1)]	Provide DEQ with written notice of intention to demolish or renovate prior to performing activities to which 40 CFR 61 Subpart M applies.
330	[40 CFR 61.148]	Delivery of the notice by U.S. Postal Service, commercial delivery service, or hand delivery is acceptable. Subpart M. [40 CFR 61.145(b)(1)]
331	[40 CFR 61.342(d)(2)(i)]	Do not install or reinstall on a facility component any insulating materials that contain commercial asbestos if the materials are either molded and friable or wet-applied and friable after drying. Subpart M.
		Benzene < 1 Mg/yr (1.1 ton/yr) total quantity. Subpart FF. [40 CFR 61.342(d)(2)(i)]
		Which Months: All Year Statistical Basis: None specified

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332 [40 CFR 61.355]

Determine compliance with 40 CFR 61 Subpart FF using the test methods and procedures specified in 40 CFR 61.355(a) through (1), as applicable. Subpart FF.

Equipment/operational data recordkeeping by electronic or hard copy at the regulation's specified frequency. Maintain records as specified in 40 CFR 61.356(a) through (n), as applicable. Maintain each record in a readily accessible location at the facility site for a period not less than two years from the date the information is recorded unless otherwise specified. Subpart FF.

Submit report: Due within 90 days after January 7, 1993. Submit a report that summarizes the regulatory status of each waste stream subject to 40 CFR 61.342 and is determined by the procedures specified in 40 CFR 61.355(c) to contain benzene. Include the information specified in 40 CFR 61.357(a)(1) through (a)(4). If there is no benzene onsite in wastes, products, by-products, or intermediates, submit an initial report that is a statement to this effect. Subpart FF. [40 CFR 61.357(a)]

Submit report: Due whenever there is a change in the process generating the waste stream that could cause the total annual benzene quantity from facility waste to increase to 1 Mg/yr (1.1 ton/yr) or more. Submit updates to the information listed in 40 CFR 61.357(a)(1) through (a)(3).

Subpart FF. [40 CFR 61.357(b)]

All affected facilities shall comply with all applicable provisions in 40 CFR 61 Subpart A.

All affected facilities shall comply with all applicable provisions in 40 CFR 63 Subpart A.

Develop a management system to oversee the implementation of the risk management program elements. [40 CFR 68.15(a)]

Assign a qualified person or position that has the overall responsibility for the development, implementation, and integration of the risk management program elements. [40 CFR 68.15(b)]

Define the lines of authority through an organization chart or similar document when responsibility for implementing individual requirements of 40 CFR 68 is assigned to persons other than the person identified under 68.15(b). [40 CFR 68.15(c)]

Equipment/operational data recordkeeping by electronic or hard copy continuously. Document the names or positions of the people, other than the person identified under 68.15(b), who are assigned responsibility for implementing individual requirements of 40 CFR 68. [40 CFR 68.15(c)]

Submit Risk Management Plan (RMP): Due no later than June 21, 1999, or three years after the date on which a regulated substance is first listed under 68.130, or the date on which a regulated substance is first present above a threshold quantity in a process. Submit in a method and format to a central point as specified by EPA prior to June 21, 1999.

Provide in the RMP an executive summary that includes a brief description of the elements listed in 68.155(a) through (g).

Complete a single registration form and include in the RMP. Cover all regulated substances handled in covered processes. Include in the registration the information specified in 68.160(b)(1) through (13).

Submit in the RMP the release scenarios specified in 68.165(a)(2). Include the data listed in 68.165(b)(1) through (13).

Submit in the RMP the information provided in 68.42(b) on each accident covered by 68.42(a).

Provide in the RMP the information indicated in 68.175(b) through (p).

Provide in the RMP the emergency response information listed in 68.180(a) through (c).

Submit in the RMP a single certification that, to the best of the signer's knowledge, information, and belief formed after reasonable inquiry, the information submitted is true, accurate, and complete. [40 CFR 68.185(b)]

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350 [40 CFR 68.190(c)]

351 [40 CFR 68.190]

352 [40 CFR 68.200]

353 [40 CFR 68.22]

354 [40 CFR 68.25]

355 [40 CFR 68.28]

356 [40 CFR 68.30]

357 [40 CFR 68.33]

358 [40 CFR 68.36(b)]

359 [40 CFR 68.36]

360 [40 CFR 68.39]

361 [40 CFR 68.42]

362 [40 CFR 68.65(a)]

363 [40 CFR 68.65(d)(2)]

364 [40 CFR 68.65(d)(3)]

365 [40 CFR 68.65(d)(3)]

Submit revised registration to EPA: Due within six months after a stationary source is no longer subject to 40 CFR 68. Indicate that the stationary source is no longer covered. [40 CFR 68.190(c)]

Review and update the RMP as specified in 68.190(b) and submit it in a method and format to a central point specified by EPA prior to June 21, 1999.

Maintain records supporting the implementation of 40 CFR 68 for five years unless otherwise provided.

Use the endpoints specified in 68.22(a) through (g) for analyses of offsite consequences.

Analyze the release scenarios in 68.25, as specified in 68.25(a) through (h).

Identify and analyze at least one alternative release scenario for each regulated toxic substance held in a covered process(es) and at least one alternative release scenario to represent all flammable substances held in covered processes, as specified in 68.28(b) through (e).

Estimate in the RMP the population within a circle with its center at the point of the release and a radius determined by the distance to the endpoint defined in 68.22(a).

List in the RMP environmental receptors within a circle with its center at the point of the release and a radius determined by the distance to the endpoint defined in 68.22(a).

Submit revised RMP: Due within six months after changes in processes, quantities stored or handled, or any other aspect of the stationary source increase or decrease the distance to the endpoint by a factor of two or more. [40 CFR 68.36(b)]

Review and update the offsite consequence analyses at least once every five years. Complete a revised analysis within six months if changes in processes, quantities stored or handled, or any other aspect of the stationary source might reasonably be expected to increase or decrease the distance to the endpoint by a factor of two or more.

Equipment/operational data recordkeeping by electronic or hard copy continuously. Maintain the records specified in 68.39(a) through (e) on the offsite consequence analyses.

Include in the five-year accident history all accidental releases from covered processes that resulted in deaths, injuries, or significant property damage on site, or known offsite deaths, injuries, evacuations, sheltering in place, property damage, or environmental damage. Include the information specified in 68.42(b)(1) through (10) for each accidental release.

Compile written process safety information, which includes information pertaining to the hazards of the regulated substances used or produced by the process, information pertaining to the technology of the process, and information pertaining to the equipment in the process, before conducting any process hazard analysis required by 40 CFR 68. [40 CFR 68.65(a)]

Equipment/operational data recordkeeping by electronic or hard copy continuously. Document that equipment complies with recognized and generally accepted good engineering practices. [40 CFR 68.65(d)(2)]

Equipment/operational data recordkeeping by electronic or hard copy continuously. Document that existing equipment, designed and constructed in accordance with codes, standards, or practices that are no longer in general use, is designed, maintained, inspected, tested, and operating in a safe manner. [40 CFR 68.65(d)(3)]

Determine that existing equipment, designed and constructed in accordance with codes, standards, or practices that are no longer in general use, is designed, maintained, inspected, tested, and operating in a safe manner. [40 CFR 68.65(d)(3)]

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- 366 [40 CFR 68.67(a)] Equipment/operational data recordkeeping by electronic or hard copy continuously. Document the priority order for conducting process hazard analyses based on a rationale which includes such considerations as extent of the process hazards, number of potentially affected employees, age of the process, and operating history of the process. [40 CFR 68.67(a)]
- 367 [40 CFR 68.67(a)] Determine the priority order for conducting process hazard analyses based on a rationale which includes such considerations as extent of the process hazards, number of potentially affected employees, age of the process, and operating history of the process. [40 CFR 68.67(a)]
- 368 [40 CFR 68.67(b)] Use one or more of the methodologies in Sec. 68.67(b)(1) through (b)(7) to determine and evaluate the hazards of the process being analyzed. [40 CFR 68.67(b)]
- 369 [40 CFR 68.67(d)] Use a team with expertise in engineering and process operations to perform the process hazard analysis. Include at least one employee who has experience and knowledge specific to the process being evaluated, and at least one employee who is knowledgeable in the specific process hazard analysis methodology being used. [40 CFR 68.67(d)]
- 370 [40 CFR 68.67(e)] Equipment/operational data recordkeeping by electronic or hard copy continuously. Document the resolution of the recommendations of the team performing the process hazard analysis, and what actions are to be taken. [40 CFR 68.67(e)]
- 371 [40 CFR 68.67(e)] Establish a system to promptly address the team's findings and recommendations; assure that the recommendations are resolved in a timely manner and that the resolution is documented; document what actions are to be taken; complete actions as soon as possible; develop a written schedule of when these actions are to be completed; communicate the actions to operating, maintenance and other employees whose work assignments are in the process and who may be affected by the recommendations or actions. [40 CFR 68.67(e)]
- 372 [40 CFR 68.67(f)] Update and revalidate the process hazard analysis at least every five years after the completion of the initial process hazard analysis, to assure that the process hazard analysis is consistent with the current process. Use a team that meets the requirements in Sec. 68.67(d). [40 CFR 68.67(f)]
- 373 [40 CFR 68.67(g)] Retain process hazards analyses and updates or revalidations for each process covered by this section, as well as the documented resolution of recommendations described in Sec. 68.67(e), for the life of the process. [40 CFR 68.67(g)]
- 374 [40 CFR 68.67] Perform an initial process hazard analysis (hazard evaluation) on processes covered by 40 CFR 68 as soon as possible, but not later than June 21, 1999. The process hazard analysis shall identify, evaluate, and control the hazards involved in the process, and address the information in 40 CFR 68.67(c)(1) through (7).
- 375 [40 CFR 68.69(a)] Develop and implement written operating procedures that provide clear instructions for safely conducting activities involved in each covered process consistent with the process safety information. Address steps for each operating phase, operating limits, safety and health considerations, and safety systems and their functions in the procedures. [40 CFR 68.69(a)]
- 376 [40 CFR 68.69(b)] Make operating procedures readily accessible to employees who work in or maintain a process. [40 CFR 68.69(b)]
- 377 [40 CFR 68.69(c)] Review operating procedures as often as necessary to assure that they reflect current operating practice, including changes that result from changes in process chemicals, technology, and equipment, and changes to stationary sources. Certify annually that these operating procedures are current and accurate. [40 CFR 68.69(c)]
- 378 [40 CFR 68.69(d)] Develop and implement safe work practices to provide for the control of hazards during specific operations. [40 CFR 68.69(d)]
- 379 [40 CFR 68.71(a)(1)] Train each employee presently involved in operating a process, and each employee before being involved in operating a newly assigned process, in an overview of the process and in the operating procedures as specified in Sec. 68.69. Emphasize the specific safety and health hazards, emergency operations including shutdown, and safe work practices applicable to the employee's job tasks. [40 CFR 68.71(a)(1)]

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- 380 [40 CFR 68.71(b)]
 Provide refresher training at least every three years, and more often if necessary, to each employee involved in operating a process to assure that the employee understands and adheres to the current operating procedures of the process. [40 CFR 68.71(b)]
 Ascertain that each employee involved in operating a process has received and understood the training required by Sec. 68.71. [40 CFR 68.71(c)]
- 382 [40 CFR 68.71(c)]
 Equipment/operational data recordkeeping by electronic or hard copy continuously. Prepare a record which contains the identity of the employee, the date of training required by 40 CFR 68.71, and the means used to verify that the employee understood the training. [40 CFR 68.71(c)]
- 383 [40 CFR 68.73(b)]
 Establish and implement written procedures to maintain the ongoing integrity of process equipment listed in Sec. 68.73(a). [40 CFR 68.73(b)]
 Train each employee involved in maintaining the ongoing integrity of process equipment in an overview of that process and its hazards and in the procedures applicable to the employee's job tasks to assure that the employee can perform the job tasks in a safe manner. [40 CFR 68.73(c)]
- 384 [40 CFR 68.73(c)]
 Equipment/operational data recordkeeping by electronic or hard copy continuously. Document each inspection and test that has been performed on process equipment. Maintain records of the information specified in Sec. 68.73(d)(4). [40 CFR 68.73(d)(4)]
- 385 [40 CFR 68.73(d)(4)]
 Perform inspections and tests following recognized and generally accepted good engineering practices on process equipment listed in 40 CFR 68.73(a). Make the frequency of inspections and tests consistent with applicable manufacturer's recommendations and good engineering practices, and more frequently if determined to be necessary by prior operating experience. [40 CFR 68.73(d)]
- 386 [40 CFR 68.73(d)]
 Correct deficiencies in equipment that are outside acceptable limits before further use or in a safe and timely manner when necessary means are taken to assure safe operation. [40 CFR 68.73(e)]
- 387 [40 CFR 68.73(e)]
 Assure that equipment as it is fabricated is suitable for the process application for which it will be used, in the construction of new plants and equipment. Perform appropriate checks and inspections to assure that equipment is installed properly and consistent with design specifications and the manufacturer's instructions. Assure that maintenance materials, spare parts and equipment are suitable for the process application for which they will be used. [40 CFR 68.73(f)]
- 388 [40 CFR 68.73(f)]
 Inform employees involved in operating a process, and maintenance and contract employees whose job tasks will be affected, of a change in the process and train them in the change, prior to start-up of the process or affected part of the process. [40 CFR 68.75(c)]
- 389 [40 CFR 68.75(c)]
 Update the process safety information required by Sec. 68.65 if a change covered by 68.75 results in a change in the process safety information. [40 CFR 68.75(d)]
- 390 [40 CFR 68.75(d)]
 Update the operating procedures or practices required by Sec. 68.69 if a change covered by 68.75 results in a change in the operating procedures or practices. [40 CFR 68.75(e)]
- 391 [40 CFR 68.75(e)]
 Establish and implement written procedures to manage changes to process chemicals, technology, equipment, and procedures; and, changes to stationary sources that affect a covered process. Assure that the considerations specified in Sec. 68.75(b)(1) through (b)(5) are addressed prior to any change.
- 392 [40 CFR 68.75] TPOR0147
 Perform a pre-startup safety review for new stationary sources and for modified stationary sources when the modification is significant enough to require a change in the process safety information. Safety review must confirm the information specified in Sec. 68.77(b)(1) through (b)(4) prior to the introduction of regulated substances to a process.
- 393 [40 CFR 68.77] TPOR0147
 Develop a report of the findings of the compliance audit required by 40 CFR 68.79(a). [40 CFR 68.79(c)]
- 394 [40 CFR 68.79(c)]

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- 395 [40 CFR 68.79(d)] Equipment/operational data recordkeeping by electronic or hard copy continuously. Document the appropriate response to each of the findings of the compliance audit, and document that deficiencies have been corrected. [40 CFR 68.79(d)]
- 396 [40 CFR 68.79(d)] Determine an appropriate response to each of the findings of the compliance audit. [40 CFR 68.79(d)]
- 397 [40 CFR 68.79(e)] Retain the two (2) most recent compliance audit reports. [40 CFR 68.79(e)]
- 398 [40 CFR 68.79] Conduct compliance audit: Due at least every three years. Certify compliance with the provisions of the prevention program to verify that procedures and practices developed under 40 CFR 68 are adequate and are being followed. Conduct compliance audit by at least one person knowledgeable in the process.
- 399 [40 CFR 68.81(c)] Establish an incident investigation team consisting of at least one person knowledgeable in the process involved, including a contract employee if the incident involved work of the contractor, and other persons with appropriate knowledge and experience to thoroughly investigate and analyze the incident. [40 CFR 68.81(c)]
- 400 [40 CFR 68.81(e)] Equipment/operational data recordkeeping by electronic or hard copy continuously. Document resolutions and corrective actions of the incident report findings and recommendations. [40 CFR 68.81(e)]
- 401 [40 CFR 68.81(e)] Establish a system to promptly address and resolve the incident report findings and recommendations. [40 CFR 68.81(e)]
- 402 [40 CFR 68.81] Conduct incident investigation: Due as promptly as possible, but not later than 48 hours following each incident which resulted in, or could reasonably have resulted in a catastrophic release of a regulated substance. Prepare a report at the conclusion of the incident investigation which includes, at a minimum, the information specified in 40 CFR 68.81(d)(1) through (5). Review the report with all affected personnel whose job tasks are relevant to the incident findings including contract employees where applicable. Retain the incident investigation reports for five years.
- 403 [40 CFR 68.81] Develop a written plan of action regarding the implementation of the employee participation required by 40 CFR 68. [40 CFR 68.83(a)]
- 404 [40 CFR 68.83(a)] Consult with employees and their representatives on the conduct and development of process hazards analyses and on the development of the other elements of process safety management. [40 CFR 68.83(b)]
- 405 [40 CFR 68.83(b)] Provide to employees and their representatives access to process hazard analyses and to all other information required to be developed under 40 CFR 68. [40 CFR 68.83(c)]
- 406 [40 CFR 68.83(c)] Issue a hot work permit for hot work operations conducted on or near a covered process. Document in the permit that the fire prevention and protection requirements in 29 CFR 1910.252(a) have been implemented prior to beginning the hot work operations; indicate the date(s) authorized for hot work; and identify the object on which hot work is to be performed. Keep permit on file until completion of the hot work operations.
- 407 [40 CFR 68.85] Obtain and evaluate information regarding the contract owner or operator's safety performance and programs, when selecting a contractor. [40 CFR 68.87(b)(1)]
- 408 [40 CFR 68.87(b)(1)] Inform contract owner or operator of the known potential fire, explosion, or toxic release hazards related to the contractor's work and the process. [40 CFR 68.87(b)(2)]
- 409 [40 CFR 68.87(b)(2)] Explain to the contract owner or operator the applicable provisions of 40 CFR 68 Subpart E. [40 CFR 68.87(b)(3)]
- 410 [40 CFR 68.87(b)(3)] Develop and implement safe work practices consistent with Sec. 68.69(d), to control the entrance, presence, and exit of the contract owner or operator and contract employees in covered process areas. [40 CFR 68.87(b)(4)]

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- 412 [40 CFR 68.87(b)(5)] Periodically evaluate the performance of the contract owner or operator in fulfilling their obligations as specified in 40 CFR 68.87(c). [40 CFR 68.87(b)(5)]
- 413 [40 CFR 68.95(a)] Develop and implement an emergency response program for the purpose of protecting public health and the environment. Include in the program the elements listed in 40 CFR 68.95(a)(1) through (4). [40 CFR 68.95(a)]
- 414 [40 CFR 68.95(c)] Coordinate the emergency response plan developed under 68.95(a)(1) with the community emergency response plan developed under 42 U.S.C. 11003. Upon request of the local emergency planning committee or emergency response officials, promptly provide information necessary for developing and implementing the community emergency response plan. [40 CFR 68.95(c)]
- 415 [40 CFR 70.5(a)(1)(iii)] Submit Title V permit application for renewal: Due 6 months before permit expiration date. [40 CFR 70.5(a)(1)(iii)]
- 416 [40 CFR 70.6(a)(3)(iii)(A)] Submit Title V monitoring results report: Due semiannually, by March 31st and September 30th for the preceding periods encompassing July through December and January through June, respectively. Submit reports to the Office of Environmental Compliance, Surveillance Division. Certify reports by a responsible company official. Clearly identify all instances of deviations from permitted monitoring requirements. For previously reported deviations, in lieu of attaching the individual deviation reports, clearly reference the communication(s)/correspondence(s) constituting the prior report, including the date the prior report was submitted. [40 CFR 70.6(a)(3)(iii)(A)]
- 417 [40 CFR 70.6(a)(3)(iii)(B)] Submit Title V excess emissions report: Due quarterly, by June 30, September 30, December 31, March 31. Submit reports of all permit deviations to the Office of Environmental Compliance, Surveillance Division. Certify all reports by a responsible official in accordance with 40 CFR 70.5(d). The reports submitted on March 31 and September 30 may be consolidated with the semi-annual reports required by 40 CFR 70.6(a)(3)(iii)(A) as long as the report clearly indicates this and all required information is included and clearly delineated in the consolidated report. Unless required by an applicable reporting requirement, a written report is not required during periods in which there is no deviation. [40 CFR 70.6(a)(3)(iii)(B)]
- 418 [40 CFR 70.6(c)(5)(iv)] Submit Title V compliance certification: Due annually, by the 31st of March. Submit to the Office of Environmental Compliance, Surveillance Division. [40 CFR 70.6(c)(5)(iv)]
- 419 [40 CFR 82.Subpart F] Comply with the standards for recycling and emissions reduction pursuant to 40 CFR Part 82, Subpart F, except as provided for Motor Vehicle Air Conditioners (MVACs) in Subpart B.
- 420 [LAC 33:III.1103] Emissions of smoke which pass onto or across a public road and create a traffic hazard by impairment of visibility as defined in LAC 33:III.111 or intensify an existing traffic hazard condition are prohibited.
- 421 [LAC 33:III.1109.B] Outdoor burning of waste material or other combustible material is prohibited.
- 422 [LAC 33:III.1303.B] Emissions of particulate matter which pass onto or across a public road and create a traffic hazard by impairment of visibility or intensify an existing traffic hazard condition are prohibited.
- 423 [LAC 33:III.2113.A] Maintain best practical housekeeping and maintenance practices at the highest possible standards to reduce the quantity of organic compounds emissions. Good housekeeping shall include, but not be limited to, the practices listed in LAC 33:III.2113.A.1-5.
- 424 [LAC 33:III.219] Failure to pay the prescribed application fee or annual fee as provided herein, within 90 days after the due date, will constitute a violation of these regulations and shall subject the person to applicable enforcement actions under the Louisiana Environmental Quality Act including, but not limited to, revocation or suspension of the applicable permit, license, registration, or variance.
- 425 [LAC 33:III.2901.D] Discharges of odorous substances at or beyond property lines which cause a perceived odor intensity of six or greater on the specified eight point butanol scale as determined by Method 41 of LAC 33:III.2901.G are prohibited.

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If requested to monitor for odor intensity, take and transport samples in a manner which minimizes alteration of the samples either by contamination or loss of material. Evaluate all samples as soon after collection as possible in accordance with the procedures set forth in LAC 33:III.2901.F.

Include a certification statement with the annual emission report and revisions to any emission report that attests that the information contained in the emission report is true, accurate, and complete, and that is signed by a responsible official, as defined in LAC 33:III.502. Include the full name of the responsible official, title, signature, date of signature and phone number of the responsible official.

Submit Annual Emissions Report (TEDI): Due annually, by the 31st of March unless otherwise directed by DEQ, to the Office of Environmental Assessment in a format specified by DEQ. Identify the quantity of emissions in the previous calendar year for any toxic air pollutant listed in Table 51.1 or Table 51.3.

Submit notification: Due to the Department of Public Safety 24-hour Louisiana Emergency Hazardous Materials Hotline at (225) 925-6595 immediately, but in no case later than 1 hour, after any discharge of a toxic air pollutant into the atmosphere that results or threatens to result in an emergency condition (a condition which could reasonably be expected to endanger the health and safety of the public, cause significant adverse impact to the land, water or air environment, or cause severe damage to property).

Submit notification: Due to SPOC, except as provided in LAC 33:III.5107.B.6, no later than 24 hours after the beginning of any unauthorized discharge into the atmosphere of a toxic air pollutant as a result of bypassing an emission control device, when the emission control bypass was not the result of an upset, and the quantity of the unauthorized bypass is greater than or equal to the lower of the Minimum Emission Rate (MER) in LAC 33:III.5112, Table 51.1, or a reportable quantity (RQ) in LAC 33:I.3931, or the quantity of the unauthorized bypass is greater than one pound and there is no MER or RQ for the substance in question. Submit notification in the manner provided in LAC 33:I.3923.

Submit notification: Due to SPOC, except as provided in LAC 33:III.5107.B.6, immediately, but in no case later than 24 hours after any unauthorized discharge of a toxic air pollutant into the atmosphere that does not cause an emergency condition, the rate or quantity of which is in excess of that allowed by permit, compliance schedule, or variance, or for upset events that exceed the reportable quantity in LAC 33:I.3931.

Submit notification in the manner provided in LAC 33:I.3923.

Submit written report: Due by certified mail to SPOC within seven calendar days of learning of any such discharge or equipment bypass as referred to in LAC 33:III.5107.B.1 through B.3. Include the information specified in LAC 33:III.5107.B.4.a.i through B.4.a.viii.

Report all discharges to the atmosphere of a toxic air pollutant from a safety relief device, a line or vessel rupture, a sudden equipment failure, or a bypass of an emission control device, regardless of quantity, IF THEY CAN BE MEASURED AND CAN BE RELIABLY QUANTIFIED USING GOOD ENGINEERING PRACTICES, to DEQ along with the annual emissions report and where otherwise specified. Include the identity of the source, the date and time of the discharge, and the approximate total loss during the discharge.

Develop a standard operating procedure (SOP) within 120 days after achieving or demonstrating compliance with the standards specified in LAC 33:III.Chapter 51. Detail in the SOP all operating procedures or parameters established to ensure that compliance with the applicable standards is maintained and address operating procedures for any monitoring system in place, specifying procedures to ensure compliance with LAC 33:III.5113.C.5. Make a written copy of the SOP available on site or at an alternate approved location for inspection by DEQ. Provide a copy of the SOP within 30 days upon request by DEQ.

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435 [LAC 33:III.5151.F.1.f]

An individual or company contracted to perform a demolition or renovation activity which disturbs RACM must be recognized by the Licensing Board for Contractors to perform asbestos abatement, and shall meet the requirements of LAC 33:III.5151.F.2 and F.3 for each demolition or renovation activity.

Activate the preplanned abatement strategy listed in LAC 33:III.5611.Table 5 when the administrative authority declares an Air Pollution Alert.

Activate the preplanned strategy listed in LAC 33:III.5611.Table 6 when the administrative authority declares an Air Pollution Warning.

Activate the preplanned abatement strategy listed in LAC 33:III.5611.Table 7 when the administrative authority declares an Air Pollution Emergency.

Prepare standby plans for the reduction of emissions during periods of Air Pollution Alert, Air Pollution Warning and Air Pollution Emergency.

Design standby plans to reduce or eliminate emissions in accordance with the objectives as set forth in LAC 33:III.5611.Tables 5, 6, and 7.

Submit standby plan for the reduction or elimination of emissions during an Air Pollution Alert, Air Pollution Warning, or Air Pollution

Emergency: Due within 30 days after requested by the administrative authority.

Comply with the provisions in 40 CFR 68, except as specified in LAC 33:III.5901.

Identify hazards that may result from accidental releases of the substances listed in 40 CFR 68.130, Table 59.0 of LAC 33:III.5907, or Table 59.1 of LAC 33:III.5913 using appropriate hazard assessment techniques, design and maintain a safe facility, and minimize the off-site consequences of accidental releases of such substances that do occur.

Submit registration: Due January 31, 1998, or within 60 days after the source becomes subject to LAC 33:III.Chapter 59, whichever is later.

Include the information listed in LAC 33:III.5911.B, and submit to the Office of Environmental Compliance.

Submit amended registration: Due to the Office of Environmental Compliance within 60 days after the information in the submitted registration is no longer accurate.

Submit Emission Inventory (EJ)/Annual Emissions Statement: Due annually, by the 31st of March for the period January 1 to December 31 of the previous year unless otherwise directed. Submit emission inventory data in the format specified by the Office of Environmental Assessment. Include all data applicable to the emissions source(s), as specified in LAC 33:III.919.A-D.

APPENDIX A. STREAMLINED EQUIPMENT LEAK MONITORING PROGRAM

Permittee shall comply with a streamlined equipment leak monitoring program. Compliance with the streamlined program in accordance with this specific condition shall serve to comply with each of the fugitive emission monitoring programs being streamlined, as indicated in the following table. Non-compliance with the streamlined program in accordance with this specific condition may subject the permittee to enforcement action for one or more of the applicable fugitive emissions programs.

- i) Permittee shall apply the streamlined program to the combined universe of components subject to any of the programs being streamlined. Any component type which does not require periodic monitoring under the overall most stringent program (40 CFR 63 Subpart H) shall be monitored as required by the most stringent requirements of any other program being streamlined and will not be exempted. The streamlined program will include any exemptions based on size of component available in any of the programs being streamlined.
- ii) Permittee shall use leak definitions and monitoring frequency based on the overall most stringent program. Percent leaker performance shall be calculated using the provisions of the overall most stringent program. Annual monitoring shall be defined as once every four quarters. Some allowance may be made in the first year of the streamlined program in order to allow for transition from existing monitoring schedules.
- iii) Permittee shall comply with recordkeeping and reporting requirements of the overall most stringent program. Semiannual reports shall be submitted on January 31 and July 31, to cover the periods July 1 through December 31 and January 1 through June 30, respectively. The semiannual reports shall include any monitoring performed within the reporting periods.

Unit or Plant Site	Program Being Streamlined	Stream Applicability	Overall Most Stringent Program
VCM Plant	40 CFR 63 Subpart H – HON	≥ 5% VOHAP	40 CFR 63 Subpart H – HON
	40 CFR 61 Subpart F – NESHAP for Vinyl Chloride	≥ 10% VCM	
	40 CFR 61 Subpart V – NESHAP for Equipment Leaks	≥ 10% VCM	
	40 CFR 60 Subparts VV – NSPS for Equipment Leaks of VOC in SOCMI or Refineries	≥ 10% VOC	
	LAC 33:III.2122 – Fugitive Emission Control for Ozone Nonattainment Areas and Specified Parish	≥ 10% VOC	
	LAC 33:III.5109 – Louisiana MACT Determination for Non-HON Sources	≥ 5% VOTAP	

APPENDIX B. COOLING TOWER FUGITIVE EMISSION CONTROL PLAN

The Cooling Tower Fugitive Emission Control Plan is designed to provide a formalized procedure for detecting and controlling emissions from exchangers in VOC (Volatile Organic Compound) service into the cooling water return to the main plant cooling tower (CT-50). This plan will be reviewed annually.

I. Cooling Water Sampling

A. Purpose

The daily sampling of the cooling water return to the main plant cooling tower and analysis for VCM, EDC, and Ethylene (the major constituents of the plant process streams which could get into the cooling water) will be used as a check for emissions from exchangers in VOC service.

B. Definition of an Action Level

A cooling water return sample, which indicates a level of 1 ppm or more (total of EDC, VCM, and Ethylene), requires that a second sample be taken and analyzed. If the second sample also indicates a level of 1 ppm, then an Action Level is detected and the Action Plan will be implemented.

C. Definition of Release

A cooling water return sample, which indicates a level of 2 ppm or more (total of EDC, VCM, and Ethylene) for two consecutive samples, indicates that a release has occurred. The Office of Environmental Compliance, Enforcement Division must be notified for the release.

D. Description of Analytical Equipment

A Perkin Elmer HS-40 sampler with an Autosystem GC with FID, or equivalent instrumentation, will be used to analyze the cooling water samples.

E. Calibration and Maintenance

The analytical equipment will be calibrated periodically and maintained as necessary to ensure reliable analyses. The analytical results for this standard sample are compared against a range of acceptable values to check the calibration of the analytical equipment.

F. Sampling Location and Procedure

A four-ounce sample is taken daily from the cooling water return line.

II. Action Plan for Response to an Action Level

If the cooling water return analysis indicates that two consecutive samples exceed 1 ppm (total of EDC, VCM, and Ethylene), a search, identification, and elimination program shall be initiated.

The action plan will consist of the following steps:

1. Additional samples will be taken of the main headers and the effluents of the individual exchangers in order to pinpoint the source of the increased emissions. Sampling will be prioritized based on the specific component of compounds (EDC, VCM, and/or Ethylene), which had increased in the cooling water return.

APPENDIX B. COOLING TOWER FUGITIVE EMISSION CONTROL PLAN

2. Immediate action will be taken, if possible, to control the increased emissions.
3. If the increased emissions are not controlled, the Operations Department Manager or his designee will be notified. The Operations Department Manager or his designee will take one of the following actions:
 - a. Act to control the increased emissions, if practical, or
 - b. Notify the Maintenance Department to take corrective action to control the increased emissions.
4. All increased emissions will be controlled and/or repaired as soon as is practical. If a delay of repair is justified, the justification shall be documented by the Operations Department Manager or his designee.

APPENDIX C. EQUIPMENT LIST

Emission Point/Identifier	Description	Note
BL-305A/B	Ethylene Purge Compressors	Vent to 1-901 A/B Thermal Oxidizer/Scrubber (EQ10039)
BL-307	Ethylene Recycle for R-301/302/303	
BL-412	Tank Farm Vent Blower	
BL-501	Propylene Compressor	
BL-605	A/B Compressor Vent	
C-201	Quench Column	
C-718	Direct Contacting Condenser	
C-718B	Stormwater Stripper Direct Contact Condenser	
F-412A/B/C/D	Tank Farm Carbon Adsorption System (Regeneration Operations)	
F-801	A/B/C/D Laboratory Carbon Beds	
H-103	Vent Condenser, T-101	
H-104	Vent Condenser, T-101	
H-107	EDC Tar Still Condenser	
H-201	A/B/C Vaporizers	
H-207	A/B Condensers, C-203	
H-210	Tar Still Condenser	
H-211	HCl Interchanger	
H-213	Quench Interchanger	
H-302	A/B Aftercoolers, R-301/302/303	
H-303	A/B/C/D/E Process Vent Condensers, R-301/302/303	
H-304	Suction Preheater, BL-307	
H-306	Purge Gas Chiller	
H-309	HCl Feed Heater	
H-315	Purge Gas Cooler, R-301/302/303	
H-316A/B	Recovery Compressor Preheater	
H-317	Nitrogen Heater, R-301/302/303	
H-412	Tank Farm Vent Recycle Cooler	
H-485	Vinyl Vent Recovery Condenser	
H-491	Vinyl Vent Recovery Condenser	

APPENDIX C. EQUIPMENT LIST

Emission Point/Identifier	Description	Note
H-501	Propylene Condenser	Vent to I-901 A/B Thermal Oxidizer/Scrubber (continued)
H-610	Chlorine Compressor Cooler	
H-611	Chlorine Compressor Cooler	
LR-HE	Heavy Ends Loading Rack	
R-201A/B/C	EDC Cracking Furnaces (Startup, Shutdown, and Clearing Operations)	
S-102	Light Ends Column Accumulator	
S-103	Heavy Ends Column Accumulator	
S-104	A/B EDC Tar Stills	
S-105A	K. O. Pot, T-101 Vent	
S-105B	BL-502 Vent Condenser K. O. Pot	
S-108	Caustic Blowdown Drum, S-207A/B	
S-109	Secondary Caustic Decanter	
S-112	Chlorine Analyzer Pot	
S-113	C-104 Overhead Surge Drum	
S-202	Quench Column Accumulator	
S-203	RV Knock Out Drum	
S-207	A/B Flake NaOH Drier	
S-208A&B	Vinyl Tar Stills	
S-214	HCl Knock Out Pot, C-202	
S-217	Knock Out Drum, H-211	
S-219	Blowdown Drum, C-202	
S-222	C-203 Blowdown Drum	
S-309	Primary Separator/Ethylene Purge Vent	
S-316	Third Stage Separator	
S-318	Primary Purge Gas Knock Out Pot	
S-319	Secondary Purge Gas Knock Out Pot	
S-322	A/B Puger Gas Drier	
S-401	Caustic Dryer	
S-403	VCM Spheres Caustic Collection Drum	

APPENDIX C. OTHER EQUIPMENT

Emission Point/Identifier	Description	Note
S-412	Tank Farm Vent K. O. Pot	Vented to I-901 A/B Thermal Oxidizer/Scrubber (continued)
S-420	VCM Check Tanks Caustic Collection Drum	
S-460	Vinyl Knock-out Pot	
S-490	Tank Car Vent K. O. Pot	
S-500	D. C. Vent K. O. Pot	
S-605	Chlorine Compressor Knock Out Pot	
S-801	Laboratory Sump Vent	
S-911A/B	Flame Arrestor Drums	